

**From:** Bowman, Randal  
**To:** [Michael Weiss - NOAA Federal](#)  
**Cc:** [Kaiini Kaloi](#)  
**Subject:** Fwd: Schatz Comments to Sec. Zinke on Papahanaumokuakea, Part 2 of 2  
**Date:** Tuesday, June 06, 2017 8:13:46 PM  
**Attachments:** [Exhibits R-BB.pdf](#)  
[image001.gif](#)  
[image002.gif](#)

---

2nd of 2

----- Forwarded message -----

**From:** **Chambers, Micah** <[micah\\_chambers@ios.doi.gov](mailto:micah_chambers@ios.doi.gov)>  
**Date:** Tue, Jun 6, 2017 at 6:49 PM  
**Subject:** Fwd: Schatz Comments to Sec. Zinke on Papahanaumokuakea, Part 2 of 2  
**To:** "Magallanes, Downey" <[downey\\_magallanes@ios.doi.gov](mailto:downey_magallanes@ios.doi.gov)>, "Bowman, Randal" <[randal\\_bowman@ios.doi.gov](mailto:randal_bowman@ios.doi.gov)>

----- Forwarded message -----

**From:** **Chang, James (Schatz)** <[James\\_Chang@schatz.senate.gov](mailto:James_Chang@schatz.senate.gov)>  
**Date:** Tue, Jun 6, 2017 at 5:55 PM  
**Subject:** Schatz Comments to Sec. Zinke on Papahanaumokuakea, Part 2 of 2  
**To:** Micah Chambers <[micah\\_chambers@ios.doi.gov](mailto:micah_chambers@ios.doi.gov)>  
**Cc:** "[amanda\\_kaster@ios.doi.gov](mailto:amanda_kaster@ios.doi.gov)" <[amanda\\_kaster@ios.doi.gov](mailto:amanda_kaster@ios.doi.gov)>, "Brunner, Danielle (Schatz)" <[Danielle\\_Brunner@schatz.senate.gov](mailto:Danielle_Brunner@schatz.senate.gov)>

## **EMAIL 2 of 2**

Aloha Micah—

Per my earlier note, this is the second of two emails with Senator Schatz's comments. Thanks very much for your help to ensure they get where they need to go.

In the event of any problem with the transmission, please do not hesitate to contact me, or Senator's Knauss Fellow, Dr. Danielle Brunner, cc'd here.

With thanks,

James

James Chang, JD

Policy Advisor

Office of Senator Schatz

202-224-7365

[www.schatz.senate.gov](http://www.schatz.senate.gov)

Follow Senator Schatz on Twitter & Facebook



--

Micah Chambers

Acting Director

Office of Congressional & Legislative Affairs

Office of the Secretary of the Interior



## EXHIBIT R

# PMNM Expansion Comments Received (Written and Oral) - Compiled by ONMS - PMNM Office

Please contact Athline Clark (athline.clark@noaa.gov) or David Swatland (david.swatland@noaa.gov) with questions

## Written Comments Received:

Pro	Con	Undecided	Location
268	51	3	Waipahu Mtg.
48	6	6	Kaua'i Mtg.
2	14	1	Pier 38
13	1	0	MDC
0	2	0	Maui

Written Comments Total:	
Pro (Individual):	331
Pro (Form):	281
Pro (Signature):	6061
Con:	74
Undecided:	10
Total Speakers at Both Meetings:*	
Pro:	67
Con:	40
Undecided:	11

## Form Letters (all PRO):

- 2 Form Letter A - Businesses
- 14 Form Letter B - Aila Family
- 4 Form Letter C
- 163 Form Letter D (page 1 only)
- 17 Form Letter E
- 81 Form Letter F

## Petition Signatures:

- 5050 Complete pages
- 908 Partial pages
- 94 Kids signatures
- 9 From Maui

## Additional Materials:

- 2 Drawings of Casper
- 1 Copy of Senator Schatz's proposal
- 10 Page 2 copies of Form Letter D

\*Please note, approximately 20% of speakers who provided oral comments also provided extensive written comments, which are included in the individual written comments total

## EXHIBIT S



EXECUTIVE CHAMBERS  
HONOLULU

DAVID Y. IGE  
GOVERNOR

August 24, 2016

The Honorable Barack H. Obama  
President of the United States  
The White House  
1600 Pennsylvania Avenue NW  
Washington, D.C. 20500

Dear Mr. President,

I am writing to convey my support for the expansion of the Papahānaumokuākea Marine National Monument as proposed by Senator Schatz in his June 16, 2016 letter.

There has been a tremendous debate locally on this issue, and I have met with both proponents and opponents listening closely to the concerns of both. While the expansion to the 200-mile EEZ boundary will present some challenges in the short term, it carefully balances the very real human needs of today with the future health of the ecosystem that sustains life in these precious Hawaiian Islands.

*Mahalo* to your administration for taking the time to conduct direct meetings and public forums to hear from the public, even though this proposal involves only federal waters and does not impact state jurisdiction. Doing things the right way for the right reasons leads to better decisions, and I know the input of fishers, Hawaiian cultural practitioners, scientists, conservationists and others interested in the proposal strengthened it.

Based on public input, I appreciate that Senator Schatz's proposal limits the expansion in the current monument southern boundary, to preserve popular fishing grounds for recreational, subsistence and commercial fishers from the main Hawaiian Islands. I understand the proposed boundary eliminates an area representing about 6.5% of the Hawai'i commercial longline fleet's current catch in pounds; fishing effort can be moved to other locations with some impact in travel time and fuel costs, but no material decrease in annual catch is expected.

A related issue that has emerged from my review is the inter-relationship between the much larger purse-seine fishing industry in the Pacific and the smaller longline fishing industry, and the relative impact on the health of the tuna fisheries and on the Hawai'i-based fishing industry. I strongly urge you to direct federal agencies to investigate the equitable balance of the fisheries in international treaty negotiations with regard to economics and fishery sustainability.

The Hon. Barack Obama  
August 24, 2016  
Page 2

As stated in my December 2015 letter to Secretaries Jewell and Pritzker, I request that the Office of Hawaiian Affairs be added as a fourth co-trustee of Papahānaumokuākea Marine National Monument. I request as well that the federal-state monument collaborative co-management structure extend to the expansion area.

The State of Hawai'i appreciates your thoughtful consideration of this proposal and the opportunities that your administration has afforded our communities to engage in this collaborative process. In these times of increasing global threats to our natural and cultural resources, globally significant action will preserve our heritage in the Papahānaumokuākea Marine National Monument for our *keiki* and our collective future.

You may be familiar with the Hawaiian proverb, *E ola ke kai, e ola kākou* – As the ocean thrives, so do we. This proposal strikes the right balance at this time for the waters surrounding the Hawaiian Islands, and it can be a model for sustainability in the other oceans of planet Earth.

Sincerely,

  
DAVID IGE  
Governor, State of Hawai'i

cc: United States Senator Brian Schatz  
United States Senator Mazie Hirono  
United States Representative Tulsi Gabbard  
Brian Deese, Senior Advisor to the President, White House Executive Office  
Christy Goldfuss, Managing Director, White House Council on Environmental Quality  
The Honorable Sally Jewell, Secretary of the Interior  
The Honorable Penny Pritzker, Secretary of Commerce  
Hawai'i Senate President Ronald Kouchi  
Hawai'i Speaker of the House Joseph M. Souki  
Suzanne Case, Hawai'i Department of Land and Natural Resources  
Office of Hawaiian Affairs Chair Robert K. Lindsey, Jr.

## EXHIBIT T



# Hirono Supports President's Expansion of Papahānaumokuākea Marine National Monument

Thursday, August 25, 2016

Senator Mazie K. Hirono released the following statement in support of the President's announced expansion of the Papahānaumokuākea Marine National Monument:

"I congratulate and thank the President for taking the important step to be a global leader in protecting ocean resources. President Obama's efforts to enhance protections for our ocean ecosystem will help to combat climate change, preserve biodiversity, and honor cultural traditions. As part of his announcement, I appreciate the President's recognition of the importance of commercial fishing to Hawaii's way of life and our shared goal of supporting Hawaii's sustainable pelagic fisheries."

## EXHIBIT U





*The Senate*  
*Office of the President*

STATE CAPITOL  
HONOLULU, HAWAII 96813

August 1, 2016

Sally Jewell  
Secretary, Department of Interior  
Nicole Buffa  
Deputy Chief of Staff  
Department of the Interior  
1849 C Street, N.W.  
Washington, DC 20240

Re: Proposed Expansion of Papahānaumokuākea Marine  
National Monument (PMNM) Public Hearing  
Tuesday, August 2, 2016, 4:00 p.m. to 7:00 p.m.  
Kauai Community College, Performing Arts Center  
3-1901 Kaumualii Highway  
Lihue, Hawaii 96766

Thank you for allowing me the opportunity to provide written comments on the proposed expansion of the PMNM. I am submitting my comments in my capacity as the Hawaii State Senator for the 8<sup>th</sup> Senatorial District, representing the islands of Kauai and Niihau.

By letter dated April 28, 2016, I sent a letter to President Barack Obama in opposition to any expansion of the PMNM. At that time, my opposition to any expansion was in response to a Pew Charitable Trust map of the proposed expansion of the PMNM.

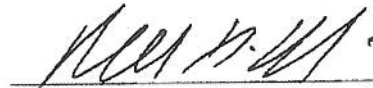
Since that time, I have had the opportunity to speak with concerned Kauai fishermen and ocean users, several members of the Department of the Interior (DOI), Council on Environmental Quality (CEQ), the National Oceanic Atmospheric Administration (NOAA), the PMNM, and United States Senator Brian Schatz and his staff both in Honolulu and in Washington, DC. It has become apparent that in order to address my constituents' concerns and to continue to allow Kauai fishermen and Kauai ocean users their unchanged access to fishing grounds vis-a-vis unfettered expansion of the PMNM, I am in support of Senator Brian Schatz's compromise proposal as it will "preserve recreational, subsistence, and commercial uses by excluding any expansion of the current southeastern boundary of the PMNM east of the 163 degree West Longitude towards the Main Hawaiian Islands." (See Letter dated June 16, 2016 from Senator Brian Schatz to President Barack Obama.)

Sally Jewell  
Nicole Bufo  
August 1, 2016  
Page 2 of 2

Please be advised that my support for Senator Schatz's proposed PMNM expansion compromise is with the understanding that there will be no further PMNM expansion.

Thank you for your anticipated cooperation and if there are any questions with regard to the foregoing, please do not hesitate to contact my office.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Ronald D. Kouchi', is written over a horizontal line.

RONALD D. KOUCHI  
Senate President

cc: Senator Brian Schatz

## EXHIBIT V

**Bernard P. Carvalho, Jr.**  
Mayor



**Wallace G. Rezentes, Jr.**  
Managing Director

**OFFICE OF THE MAYOR**  
**County of Kaua'i, State of Hawai'i**  
4444 Rice Street, Suite 235, Līhu'e, Hawai'i 96766  
TEL (808) 241-4900 FAX (808) 241-6877

August 25, 2016

The Honorable Barack Obama  
President of the United States  
The White House  
1600 Pennsylvania Avenue, NW  
Washington, DC 20500

Dear Mr. President:

Thank you for allowing me the opportunity to provide my written support of the proposed expansion of the PMNM as the Mayor of the County of Kaua'i.

In my letter dated May 5, 2016, I sent a letter to President Barack Obama in opposition to any expansion of the PMNM.

Since that time, I have reconsidered my position and after having an opportunity to speak to local fisherman and Kaua'i ocean users, I am in support of Senator Brian Schatz's compromise proposal as it will "preserve recreational, subsistence, and commercial uses by excluding any expansion of the current southeastern boundary of the PMNM east of the 163 degree West Longitude towards the Main Hawaiian Islands.(See Letter dated June 16, 2016 from Senator Brian Schatz to President Barack Obama.)

Please be advised that my support for Senator Schatz's proposed PMNM expansion compromise is with the understanding that there will be no further PMNM expansion.

Thank you for your cooperation and if there are any questions, please do not hesitate to contact my office.

Me ke Aloha Pumehana,

Bernard P. Carvalho, Jr.  
Mayor

cc: Senator Brian Schatz

*An Equal Opportunity Employer*

## EXHIBIT W



# Why US Senator Brian Schatz's plan to expand the Papahānaumokuākea Monument needs to happen

JUNE 29, 2016 BY [ANTHONY PIGNATARO](#) 0 COMMENTS

The [Papahānaumokuākea Marine National Monument](#) is over a thousand miles long. The reserve encompasses the atolls and formations that make up the Northwestern Hawaiian Islands. It's one of the largest marine conservation areas in the world, encompassing nearly 140,000 square miles of the Pacific—more land area than all of America's National Parks combined, in fact. If superimposed on a map of the continental United States, the archipelago would stretch from Chesapeake Bay in Virginia to South Dakota's eastern border.

It was first created a decade ago—by President George W. Bush, of all people. “Our duty is to use the land and seas wisely, or sometimes not use them at all,” Bush said at the time. “Good stewardship of the environment is not just a personal responsibility, it is a public value.”

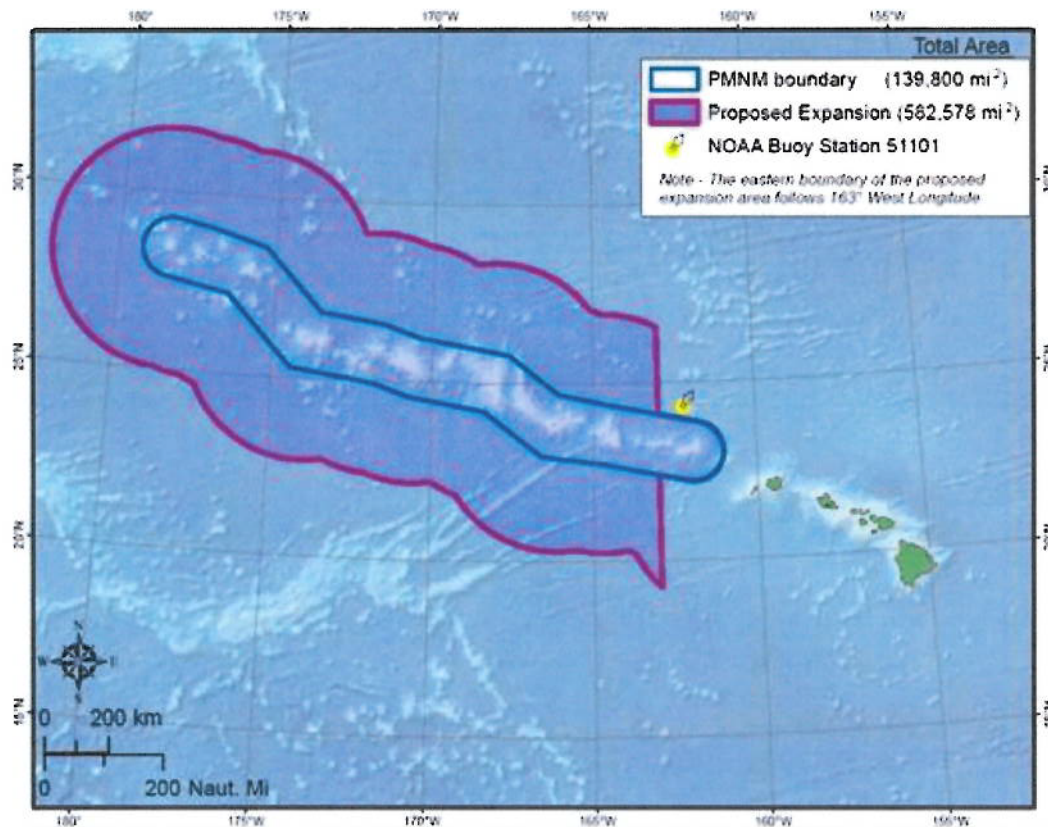
When Bush said those words, the monument was the largest marine reserve in the world. Today's it's slipped to the 10th biggest, but if U.S. Senator Brian Schatz, D–Hawaii, has his way, President Barack Obama will expand the monument to five times its current area—more than 580,000 square miles. If that happens, the Papahānaumokuākea Marine National Monument (PMNM) will once again become the largest marine protected area in the world.

“A thoughtful expansion of the PMNM will continue Hawaii's long history of sustainable use of the land and oceans into the future, and help ensure that we can give our children the legacy of a healthy, vibrant Pacific Ocean,” Schatz wrote in a June 16 letter to Obama—exactly 10 years and one day after Bush officially created the monument. “As we commemorate the tenth anniversary of the establishment of the PMNM, I believe this proposal aptly recognizes that milestone.”

Access to the monument is strictly restricted, and rightly so. The coral reefs (and sparkling white atolls, which are formed from ancient, crushed coral) that make up the PMNM are home to more than 7,000 distinct marine species, according to public relations materials produced by the officials who manage the monument. These species include the green turtle (classified as threatened), the Hawaii monk seal (endangered) and 22 species of seabirds (monument officials estimate that 14 million birds make their homes in the Northwestern Hawaiian Islands). One of those birds, the Laysan Duck, is considered to be “the world's most endangered duck.”

Though the monument (except for Midway Island) is part of Hawaii, not everyone here welcomes the idea of expansion. The reason is simple fear: closing off such a vast tract of ocean would harm Hawaii's commercial fishing industry. In fact, Schatz says that expanding the monument will actually help Hawaii's fishing industry.

"The best available science indicates that expanding the PMNM will strengthen an ecosystem that sustains tuna, swordfish, seabirds, sea turtles, and Hawaiian monk seals," Schatz said in his letter to Obama. "This strengthening will, in turn, support more productive fisheries outside the PMNM and provide a vigorous carbon sink to combat climate change. Protecting this region more thoroughly will also preserve undiscovered biodiversity for future discoveries, and maintain a reservoir of genetic diversity that will allow marine species the greatest possible chance of adapting to environmental change. Moreover, the expanded region contains significant bio-cultural resources and archaeological sites that further justify use of the Antiquities Act."



The islands—especially Nihoa and Mokumanamana (which is also known as Necker Island)—are extremely important in Hawaiian history and culture. "Based on radiocarbon data, it's been estimated that Nihoa and Mokumanamana could have been inhabited from 1000 A.D. to 1700 A. D.," states the official Papahānaumokuākea website. "Nihoa Island, where there is significant soil development, has over 88 cultural sites, including ceremonial, residential, and agricultural features. Mokumanamana Island has 52 cultural sites, including ceremonial and temporary habitation features."



More recently (well, relatively), the monument is the final resting place for many shipwrecks, including the bones of the aircraft carrier *USS Yorktown*, sunk at the battle of Midway in June 1942 (if the monument expands, its new borders will include the wrecks of the four Japanese carriers also lost at that battle—the *Akagi*, *Kaga*, *Hiryu* and *Soryu*. Other wrecks in the monument include the American whaler *Parker* (lost in 1842), the British sailing vessel *Dunnottar Castle* (lost in 1886) and the American submarine rescue ship *Macaw* (lost in 1943).

For these and other reasons, a group of Native Hawaiian activists and officials asked Obama back in January to expand the monument. “The name Papahānaumokuākea commemorates the union of two Hawaiian ancestors—Papahānaumoku and Wakea—who gave rise to the Hawaiian archipelago and our people,” stated the Jan. 29 letter, signed by William Aila, Kamana’opono Crabbe, Isaac Harp, Kekuēwa Kikiloī, Kaleo Manuel, Victoria Holt Takamine and Nainoa Thompson. “Native Hawaiians remain deeply connected to the Northwestern Hawaiian Islands and surrounding waters on genealogical, cultural and spiritual levels.”

The Hawaiians signing the letter called the monument “a unique and generally isolated ocean gem.” Expansion, they say, is vital because of climate change.

“While the current boundary of Papahānaumokuākea includes vital habitat for a number of species, it does not fully protect habitat and travel routes for several species including Hawaiian Monk Seals, green sea turtles, sharks, whales, Black-footed and Laysan Albatrosses as well as other species,” states the letter. “Additionally, large, fully protected marine reserves and sanctuaries are more resilient to climate change and therefore have emerged as important to mitigating the impacts of our warming planet.”

In a [Feb. 16 Honolulu Civil Beat story](#) on the letter, Thompson added that expanding the PMNM would be a “give to the children of the Earth.”

But on May 3, a separate group of 30 state legislators also wrote to Obama. They asked him not to expand the monument. In fact, they say the monument has already damaged Hawaii’s fishing industry.

“The fishing and seafood industry is an integral part of Hawaii’s culture, identity, and economy,” stated that letter, signers of which included House Speaker Joe Souki, D—Wailuku and Representatives Lynn DeCoite, D—East Maui, Molokai, Lanai, Angus McKelvey, D—West Maui and Kyle Yamashita, D—Upcountry. “While we understand the intent of the creation of the Monument, we do not support any expansion of the size and scope of the Monument. The use restrictions that apply within the Monument’s boundaries have already eliminated 50% of Hawaii’s bottomfish fishery, which includes 17 permits, including those dedicated to indigenous Native Hawaiian fishing communities. Hawaii’s bottomfish supply, which includes fish such as onaga and



opakapaka, is not completely dependent on individual Main Hawaiian Islands bottomfish fishermen and import. This was a direct result of the declaration of the Monument.”

At the same time, Governor David Ige also seemed hesitant to support expansion. “Generally, some expansion of the national marine monument makes sense,” Ige said in [a May 12 Civil Beat story](#). “There are concerns from commercial fishermen, especially in areas around Kauai and Niihau, so I think there would be a way to take these concerns into consideration.”

But Schatz’s June 16 proposal actually includes provision to help Kauai and Ni’ihau fishing interests. His letter to Obama says there should be no expansion “of the current southeastern boundary of the PMNM east of 163° West Longitude towards the Main Hawaiian Islands.” This carve-out would include “a particularly active fishing spot near NOAA Weather Buoy 51101,” according to Schatz’s letter.

That concession to the fishing industry seems to alleviated much of the concern over expansion. “Like the Polynesians who first settled these islands, we can balance the management of this unique natural habitat and its historic artifacts with the needs of the human population,” Ige said on June 16 when Schatz released his proposal to the media. “Sen. Schatz has addressed many of the concerns I’ve heard about the expansion of the Papahānaumokuākea Marine National Monument and has proposed reasonable accommodations for local fishers who are helping to feed our families. I look forward to the public process as it moves forward.”

What’s more, Rep. McKelvey—who signed the May 3 letter urging Obama reject expansion—told us that he’s changed his mind. Schatz’s proposal is okay with him.

“Senator Schatz has addressed the concerns that I had regarding the expansion of the Papahānaumokuākea Marine National Monument and has proposed reasonable accommodations for local fishers who help feed our families,” McKelvey said in a June 24 email. “Senator Schatz’s June 16th proposal that includes a carve-out for Kauai and Ni’ihau fishermen has alleviated my concerns regarding the monument’s expansion.” (Representatives Souki, DeCoite and Yamashita didn’t respond to our requests for comment.)

So that’s pretty much it. Except, of course, that Obama hasn’t actually expanded the monument yet. “The president is likely to make the designation at some point in the next few months, according to several individuals who have been briefed on the process but asked for anonymity because no final decision has been made,” [The Washington Post reported on June 16](#).

## EXHIBIT X



## HOUSE OF REPRESENTATIVES

STATE OF HAWAII  
STATE CAPITOL  
HONOLULU, HAWAII 96813

April 19, 2016

The Honorable Barack Obama  
President of the United States of America  
The White House  
1600 Pennsylvania Avenue NW  
Washington, DC 20500

Dear Mr. President:

As a member of the Hawai'i State Legislature, I write in support of expanding the Papahānaumokuākea Marine National Monument.

For our Native Hawaiian community, the Northwestern Hawaiian Islands are where life began. Today, marine life thrives within the monument because it was protected by your predecessor 10 years ago. However, there are important cultural and biological resources that fall outside the current boundary of the monument. Expanding Papahānaumokuākea will help protect these resources and increase our resilience to the impacts of climate change.

Extending the monument boundary to the full 200 nautical mile limit of the Northwestern Hawaiian Islands exclusive economic zone (EEZ) - excluding the waters around of Ni'ihau and Kaua'i - would protect one of the most unique ocean ecosystems on the planet. Within this diverse isolated region, there are more than 7,000 marine species, and scientists estimate that more than a quarter of those are endemic. The area is one of the few remaining predator-dominated ecosystems in the world, with strong populations of sharks, Hawaiian grouper and other large predatory fish that have been heavily overfished elsewhere.

While the current boundary of Papahānaumokuākea includes vital habitat for a number of species, it does not fully protect habitat and travel routes for several species including Hawaiian Monk Seals, green sea turtles, sharks, whales, Black-footed and Laysan Albatrosses as well as other species. It is important to note that all of these biological species are also considered cultural species by Native Hawaiians.

The area proposed for expansion is not a major fishing ground and log books show that the effort in the region has been dramatically decreasing over the last five years. The Hawai'i longline catch quotas are set by the negotiations that take place at the Western Central Pacific Fisheries Commission, so extending the boundary of the monument will not reduce catch and therefore have no economic impact on the fishery.

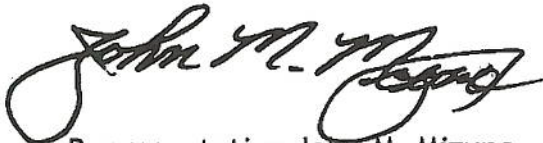


The Honorable Barack Obama  
President of the United States of America  
Letter of Support for the Expansion of the Papahānaumokuākea Marine National  
Monument  
April 19, 2016  
Page 2

Finally, Mr. President, Hawai'i is honored to host the World Conservation Congress in September of this year. This global event presents an opportunity for Hawai'i the United States to lead the world once again on one of humanity's greatest challenges - improving the health of the ocean. Expanding the Papahānaumokuākea Marine National Monument is the single biggest step you can take to leave a historical legacy for future generations.

Mahalo for your consideration and we look forward to seeing you on your next trip to your birth state of Hawai'i.

Aloha,

A handwritten signature in black ink, appearing to read "John M. Mizuno". The signature is stylized with a large, looping "J" and a cursive "M".

Representative John M. Mizuno  
Vice Speaker  
Hawaii House of Representatives  
District 28

**Representative John M. Mizuno – VICE SPEAKER of the House of Representatives**

*District 28, Kamehameha Heights, Kalihi Valley, portion of Lower Kalihi*

State Capitol, Room 439 – Honolulu, Hawaii 96813

Phone: (808) 586-6050 – Fax: (808) 586-6051

Email: [repimizuno@capitol.hawaii.gov](mailto:repimizuno@capitol.hawaii.gov)

DOI-2018-06 00109

## EXHIBIT Y

## Obama Announces a Vast Expansion of the Northwest Hawaiian Islands Marine National Monument

*Recreational fishing is allowed to continue in the expanded area*

**Alexandria, VA – August 26, 2016** – Today, President Obama announced a vast expansion of the Northwest Hawaiian Islands Marine National Monument, known as Papahānaumokuākea, out to 200 miles or the limits of the U.S. Exclusive Economic Zone, creating the world's largest marine protected area. In 2006, President George W. Bush created the monument with a boundary which extended to 50 miles and excluded recreational fishing.

The new Presidential Proclamation moves to conserve the physical and living marine resources within the Monument's waters. All commercial resource extraction activities including commercial fishing, oil exploration and mineral extraction are prohibited in the expanded areas.

Non-commercial fishing, such as recreational fishing and resources for Native Hawaiian cultural practices, are permitted in the expanded area. NOAA and the Department of the Interior will be responsible for managing the expanded marine monument and have been given three years to put forward implementing regulations. President Obama's action follows a proposal put forward by Sen. Brian Schatz (D-Hawaii), Hawaiian state officials and Native Hawaiian leaders.

"We are pleased that the administration recognizes the conservation contributions of sportfishing" said Scott Gudes, vice president of Government Affairs for the American Sportfishing Association. "The uses allowed to continue, such as boating and recreational fishing, show a true appreciation of the value of outdoor recreation for our nation's citizens. Outdoor recreation is about appreciating nature and the outdoors, as much as it is about jobs and the economy."

Gudes continued, "We greatly appreciate the contributions of Sen. Schatz in this process. The expansion boundaries he proposed were adopted in this proclamation."

"This designation is an important example of how resource conservation and recreational activities, such as sportfishing and boating, can go hand in hand," noted Nicole Vasilaros, National Marine Manufacturers Association vice president. "We applaud the Obama Administration and Sen. Schatz for their efforts and continued recognition of the important role of the recreational economy."

"Recreational fishing and boating are compatible with conservation, and that is brightly highlighted in this designation," said Center for Coastal Conservation President Jeff Angers. "Sen. Schatz's leadership ensures that anglers, America's original conservationists, will be included as management partners."

---

###

*The [American Sportfishing Association](#) (ASA) is the sportfishing industry's trade association committed to representing the interests of the sportfishing and boating industries as well as the entire sportfishing community. We give the industry and anglers a unified voice when emerging laws and policies could significantly affect sportfishing business or sportfishing itself. ASA invests in long-term ventures to ensure the industry will remain strong and prosperous, as well as safeguard and promote the enduring economic, conservation and social values of sportfishing in America. ASA also gives America's 46 million anglers a voice in policy decisions that affect their ability to sustainably fish on our nation's waterways through [Keep America Fishing®](#), our national angler advocacy campaign. America's anglers generate more than \$48 billion in retail sales with a \$115 billion impact on the nation's economy creating employment for more than 828,000 people.*

## EXHIBIT Z



# EXPAND PAPAHĀNAUMOKUĀKEA

He Pu'uhonua no Hawai'i



A Sanctuary for our Ocean Heritage

[www.expandpmnm.com](http://www.expandpmnm.com)

Dear President Obama,

The effects of climate change are having devastating impacts on our ocean resources, and are only expected to worsen in coming years. We are presently experiencing the most extensive period of coral bleaching on record, with unprecedented levels of losses over time and space. The expansion of the Western Pacific Warming Pool is already affecting the distribution of pelagic fishes away from this area. The geographical location of the Papahānaumokuākea Marine National Monument, encompassing some of the northern most coral reefs in the world and far to the north and east of the Warming Pool, heightens the value of this area as a refuge and center for supporting resilience to climate change impacts.

Our oceans and those who depend on them for their ecological, economic and cultural benefits are threatened by unprecedented levels of degradation and losses tied to human-induced stress and exploitation. Pollution, overfishing and the combined effects of ocean warming and acidification tied to climate change are negatively affecting our oceans and the living resources within. Marine Protected Areas (MPA's) are a proven tool to enhance populations of fishes, marine invertebrates, turtles, marine mammals and sea birds. Strongly protected areas have been shown to be more resilient to impacts of climate change compared to unprotected areas. Due to the ever-increasing human footprint, the only refuges left in the world are those we choose to establish and enforce.

The ideal MPA would contain a diversity of habitats and species of bio-cultural importance, be large, relatively isolated, is well connected by ocean currents to collect incoming larvae, juvenile and adult organisms, and serve as a source of sea life for other locations. It should be protected from resource exploitation, noise, pollution and be distant from areas experiencing substantial warming. The Papahānaumokuākea Marine National Monument (PMNM) is such a place, with a unique group of species and among the highest levels of endemism, supporting species found nowhere else in the world. The coral reefs within the Northwestern Hawaiian Islands are some of the northernmost in the world and lie within a temperate zone. They are viewed as among those most likely to survive alarming trends in ocean warming as a result of climate change. The deep seafloor in this region is home to the oldest living animals on earth, Golden Corals that live to be over 4,000 years old. Fish and larvae travel great distances and are not constrained by lines on a map. Establishment of marine protected areas that safeguard our marine resources is a responsibility that we owe to future generations. By expanding the



existing protections from 50 NM to 200 NM, the “principal” in our children’s account of marine resources will be substantially enhanced, as will be the amount of “interest” that can be drawn sustainably into the future.

There is a growing consensus among marine scientists that 30% of the oceans be set aside for adequate protection against human exploitation, yet only two percent presently benefits from full protection. Expanding the Papahānaumokuākea Marine National Monument from the current 50-mile boundary to the full 200-mile EEZ will be a substantial step in the right direction, creating the largest reserve in the world. This decision is scientifically supported and provides substantial hope of leaving a legacy of ocean resources and benefits for future generations. We are concerned that there are few, if any, such opportunities remaining to establish strongly protected areas such as Papahānaumokuākea. We strongly encourage President Obama to make a brave, sound, and responsible choice by providing expanded protection for this unique and important Monument.

The international marine conservation science community is unified in our support to expand the Papahānaumokuākea Marine National Monument (PMNM) boundary from 50 nautical miles to the 200 nautical mile exclusive economic zone. We urge President Obama to use his executive authority to expand PMNM, and leave a lasting legacy of marine resources for future generations.

Sincerely,

Robert Richmond  
Kewalo Marine Laboratory

Ruth Gates  
Hawaii Institute of Marine Biology

Doug McCauley  
UC Santa Barbara

Rashid Sumaila  
University of British Columbia

Mark Hixon  
University of Hawaii at Manoa

Rob Dunbar  
Stanford University

Richard Pyle  
Bishop Museum

Bob Steneck  
University of Maine

Larry Crowder  
Stanford University

Peter Mumby  
University of Queensland

Terry Hughes  
Australian Research Council Centre of  
Excellence Coral Reef Studies

Steve Palumbi  
Stanford University

Juan Carlos Castilla  
Pontificia Universidad Catolica de Chile

Jeremy Jackson  
Scripps Institute of Oceanography

David Obura  
CORDIO East Africa

Holly Bik  
University of California Riverside

Jessica Carilli  
University of Massachusetts Boston

John Kittinger  
Conservation International

Rick MacPherson  
Pelagica Consulting

Stuart Sandin  
Scripps Institute of Oceanography

C. Mark Eakin  
Oceanographer

Christina Kellogg  
USGS

Christy Semmens  
REEF

John Ogden  
USF

Fran Castro  
CNMI Coastal Resource Management

John Claydon  
Turks & Caicos Department of Environment  
and Maritime Affairs

Barbara Block  
Stanford University

Forest Rohwer  
San Diego State University

Holly Bolick  
Bishop Museum

Andrew Thaler  
Virginia Institute of Marine Science

John McManus  
University of Miami

Peter Sale  
University of Windsor

Sarah Frias-Torres  
Smithsonian Marine Station

Nadia Bood  
World Wildlife Fund

Michael Webster  
Coral Reef Alliance

Mark Vermeij  
University of Amsterdam

Brice Semmens  
SIO/UCSD

Rili Djohani  
Coral Triangle Center

Stephanie Wear  
The Nature Conservancy

Mark Schrope  
Schmidt Marine Technology Partners

Emma Doyle  
GCFI

Sangeeta Mangubhai  
Wildlife Conservation Society

A	wager	researcher	DRA
A	Webb	PHD student	NIOZ
Aaron	O'Dea	PhD	Smithsonian
Aaron	Shultz	Great Lakes Indian Fish and Wildlife Commission	Climate Change Fisheries Biologist
Aaron	Walker	unsure	MSU
Aaron	Hilomen	Engineer	university of the philippines
Aaron Hartmann		postdoc	Smithsonian/SDSU
Abby	Lapointe	University of Hawaii	
Abel	Valdivia	Center for Biological Diversity	Marine Scientist
Achiev Chung		marine biologist	Reef Guardian
Acroid	duresa	grad student	
Adalfo	Bianichini	PhD	FURG-Brazil
Adam S	Reed	Research Fellow	University of Southhampton
adelle	isechel	researcher	picrc
Adolfo	Tortolero	PhD Student	Guadalajara University
Adolfo Tortolgro		PhD student	Universidad de Guadalajara
Adrian Shur		Phd	UCSB
Adriana	Humanes	phd student	james cook university
Adriana	Verges	UNSW Australia	Senior lecturer
Adriana	Santacruz-Castro	Academia Sinica	PhD Candidate
Adrien	Comte	Mr	University Western Brittany
Aero	Leplastriek	scientist	A.N.U.
Ahmad	Allahgholi		
Aileen Maldonado		lecturer	The School for Field Studies
akeem	Olaniyi	Osun States College of Education PMB 5089 ilesa Osun State Nigeria	Dr
Alan	Verde	Maine Maritime Academy	Professor & Marine Biologist/Scientist
Alana	Yurkanin	TNC Intern	TNC
Alba	Gonzalez-Posada	Dr	Mexico, Conabio
Alba Gonzalez	Poshpa	PhD	Conabio
Alberto	Acosta	PHD	
Alberto Rodriguez		PhD	Univ Queensland
Alealani	Dudoit	MS	HIMB, UHM
Alealani Dudoit		MS	HIMB, UHM
Alejandro	Gouzala	Phd Student	Penn state



Inewers			
Alesko	Yamazaki	Assistant Professor	Hokkaido University
Alex	Du	MS	HIMB
Alex	Wegmann	PhD	TNC
Alex	Wyatt	The University of Tokyo	Dr
Alex	Carter	Dr.	James Cook University
Alexander	Kattan	KAUST	MSc
Alexander	Shumaker		
Alexandra	Chevronet	Publishing Edator	ESCOM
alexandra	dempsey	scientist	living ocean foundation
Alexandra	Grutter	The University of Queensland	Dr
Alexandra	Wen	HIMB	
Alice	Rogers	PhD	University of Queensland
Alicia	Lloyd	University of Technology Sydney	Dr
Alina	Castillo	Mrs	Chapel Hill Carrboro City Schools Texas A&M university- corpus christi
Aline	trejo	research assistant	
Alison	Gould	University of Michigan	PhD Candidate
Alison	Monroe	PHD student	Kaust
Alistair	Dove	Georgia Aquarium	Director of Research & Conservation
Alistair	Sponsel	Assistant Professor	Vanderbilt University
alix	santos	student	up-diliman
Allen	Andrews	Phd	NOAA Fisheries
Allison	Kirby	UH Manoa	Student
Allison	Miller		Biological Technician
allison	penniman	phd candidate	ucla
Alma Paola	Rodriguez	Associate Professor	Universidad de Guadalajara
Alma Poola Rodrigues		Associate Professor	Universidad de Guadalaaja
Alvin	SuÃjrez	Comunidad y Biodiversidad, A.C.	Ph.D.
Alyssa	Marshell	Sultan Qaboos University	Assistant Professor
alyssa	marslere	Assistant Professor	SQU
Amanda	Carter	Scripps Institution of Oceanography	Ph.D. Student
Amanda	Carter	MSc	SIO
Amanda	Ford	phd	zmt, germany
Amanda	Maggio	Microbiologist	UH manoa
Amanda	Mills	Amec Foster Wheeler	Environmental Scientist
amber	whitte	habitat researcher	
Ameris	Silvia	PHD student	University of Baren

Amicar Levi Cupul-Magana	phd	Universidad de Guadalajara
Amy Appatt	Asst Scientist	WHOI
Amy Baco-Taylor	Florida State University	Associate Professor
Amy Briggs	Student	UGA
Amy Put	Dr	Chinese Chair of Hong Kong
Ana Belen Yanez	CLP Biologist	CLP-FFI
Ana Cobiñn	SDSU	M.S.
Ana Martinez Fernandez	Phd Student	UC Santa Cruz
Ana Palaciu	Ms	U miami
Ana Teresa Herrera	Dr.	Universidad Central Venezuela
Anamica Bedi	University of Hawaii	Research Assistant
Anastasia Barszak	biologist	UNAM- Mexico
Anastazia Banaszak	UNAM	Head of department.
Anay Forero	phd	genoa university
Ancus Thompson	Mr	Australian Inst of Marine Science
anders paulsson	musician	coral guardians
Anders Paulsson	Coral Guardians	Artistic Director
andew chin	professor	James Cook University
Andrea Chan	Graduate Student	Penn State
andrea filci	student	ZMT Bremen
Andrea Gomez	PHD student	City College of NY
Andrea Gori	Universitat de Barcelona	PhD
Andrea Grottoli	The Ohio State University	Professor
Andrea Kealoha	Oceanography Dept, Texas A&M	Doctoral Student
andrea rivera	phd candidate	cinvestav mexico
Andreas Kubicek	Dr	UQ
andres alegria	mr	center marine studies
Andrew Bauman	National University of Singapore	Postdoctoral Fellow
Andrew Negri	PhD	AIMS
Andrew Olds	University of the Sunshine Coast	Dr
Andrew Shantz	Post Doc	UCSB
Andrew Thaler	Virginia Institute of Marine Science	Visiting Scientist
Andrew Torres	Master Student	University of PHC Diliman
Andrew Dickson	Supporter	Teacher
Andrew Hoey	research fellow	A JCO
Andriana fragola	student	Seton Hall University
Andy Mogg	Dr	Sams

Angela	Othmeyer	Social Scientist	NOAA
Angela	Richards Dona	University of Hawaii at Manoa	
Angela Richards	Dona	research assistant	UH Monoa
Angelo	Villagomez	The Pew Charitable Trusts	Officer
Anita	nedosyko	researcher	finders university s.a.
Anita	Pritchett	Program Coordinator	Manada Conservancy
Anke	Klueter		Dr
ann	cleveland	researcher	marine maritime academy
Ann Marie	Gawel	Biologist	USFWS
ann marie	nilert	Friend	ms.
Anna	Mikkelsen	University of Hawaii at Hilo, Marine Science student	Student
Anna	Salih	Dr	Western Sydney university
anna	tarsik	phd candidate	university of georgia
Anna	Vinton	Yale University	PhD student
Anne	Rosinski	University of Hawaii at Manoa	PhD student/Marine Resource Specialist
Anneli	Å–rtqvist		
Annette	Breckwoldt	Leibniz Center for Tropical Marine Ecology (ZMT)	Dr.
Anthony	Larkum	University of Technology Sydney	Adjunct Professor
Antone	Ruisay	PHD canidate	
Anya	brown	phd student	uga
Apirut	Nilpanapan	Mr.	claululengkorn university
Apple	Chavanich	assoc prof	chulalongkorn univ/ thailand
April	Ridlar	Ms	UC Santa barbara
Ardea	Licuanan	De La Salle University	Reseach assistant
Ariana	Huffinger	PhD Student	HIMB
Arielle Levine		Assoc. Professor	SDSU
Arjun	Chennu	Max Planck Institute for Marine Microbiology	Dr.
Asam	Suchley	Student	UNAM
Ashley	Rehsa	Ms	UCI
Ashley	Carabetta	Biologist	SIO
Ashley	sprouse	Phd student	victoria university of wellington
Ashton	Williams	Divemaster	Univ. of Guam
Astui	Watanate	Assistant Professor	Tokyo Tech
Atsuko	Kanazawa	Michigan State University	Dr.
Atsushi	Fujimara	PHD	OIST, okinawa
Audueas	Huas	PHD	SDSU
Auke	U.	Biologist	



Austin	hunter	student	eckard college
Austin	Yeung		
Autum	burm	ms	stream
Autumn Haas		PhD	SDSU
Bagriel A Quiles-Verez		Mr	Univ South Florida
Barbara	Block	Stanford	Professor
Barbara	Kojis	Dr	Tropical Discoveries
Barry	Allen	Dept of Env. Studies, Rollins College	Associate Professor
Bealy? French		PhD student	UCSD
belinda	nechnik	dr	sydney university
Belinda Dechniu		Dr	USYD
Ben	Konoles	PHD student	SDSU
Ben	Miller	Research	Carmabi
Ben	Tihil	Phd student	Ohio state
Ben	Titus	Student	USU
Ben	U	Assistant Professor	CAL Poly
Ben Hume		PhD	Univ Southhampton UK
Ben Neal		PhD	Begelow Labs for Ocean Science
Benedict Pasquea		MS	UTAS
Benjamin	muelle	researcher	carmasi curacao
Bernhard	Riegl	Nova Southeastern University	Professor
bert	weeks		the nature conservancy
Bethanie	Edwards	Center for Microbial Oceanography Research & Education	Dr.
bethany	kimplao	teacher	kamehameha
Bhavana	Rakesh	NOAA/NESDIS/NCEI	Coral Reef Information System IT Lead
Bhavana Rakesh			NOAA
Blake	Ushijimo	Post Doc	oregon state university
Blake Ushijima		Phd	Oregon State Univ
Bndeiva Lienmar		MS	James Cook Univ
Bonnie	Lewis	Ms	Griffith Uni
Boze	Hancock	marine scientist	TNC
Bradley	Oadyke	PhD	ANU
brenda	bennett	master student	tamucc
Brendan	Tougher	Anthropocene Institute	Product Manager
brener	kelly	PHD student	impe
brett	parker	coordinator	noaa
Brian	Nedved	University of Hawaii at Manoa	Jr. Researcher

Brian	Neilson	Biologist	DLNR/DAR
Brian	Stockwell	PHD student	Old Dominion University
Brian Kelly		PhD student	UCSD
Brian Kinsmen			Navy
Brianna	Fradella		
Brice	semmens	prof	sio/ucsd
Bridgette Sommer		Dr	Univ Sydney
Britta	Schaffelke	researcher	australian inst of marine science
Brock	Bureith	Masters Studenbt	JCU
Brownes	Hancock	Student	Santa Montica college
Bruce	Carlson	Georgia Aquarium	Conservation Director, Emeritus
Bruce Johnson		PhD	Pro-Oceanus Systems Inc
Bruno	Carturan	UBC	PhD candidate
Bundes	allan	Dr	JCU
Caitlin	Shishido	University of Hawaii	Graduate Student
Caitlyn	Oeneuere	grad	knal, UIT
camria	brawn	msc	whoi
Candrda	Savage	Associate Professor	Orago, New Zealand
Cara	Fiore		
Carery	martinez	secretariat	Islands cr coute
Carlie	Wiener	Communications Director	Schmidt Ocean Institute
Carlo	Caruso	Stanford University / Hawai'i Institute of Marine Biology	Graduate Student
Carlos	Ferrish	PhD	
Carlos	Prada	PhD	Penn State
Carlos	Randall	Post Doc	FIT
Carlos Toledo Hernandez		Dr	Sociedad Ambiente Marina
Carmen	Antaky	Grad Student	UH manoa
Carol			
Buitrago	Lopez	PHD	KAUST
Carolina	Carpenter	ICRS participant.	Student
Caroline Dube			CRIOBE
Carouua	Castro	Ms	UQ
Carrie	Kappel	University of California Santa Barbara	Associate Researcher
carrie	sim	student	uni of old
Casey	Scott	Park Ranger	National Park Service
Casey	Benkwitt	PhD	Oregon State University
Cat	Ajun	Phd	JCU
Catalina	A	PHD student	James Cook University



Catalina Ramirez		Research Assistant	Gilssen University
Catalina Reyes-Nivia		PhD	Univ Queensland
Catherine	Courtier	Student	Scripps inst of Oceanography
Catherine	Kim	University of Queensland	Phd student
Catherine	McFadden	Harvey Mudd College	Professor of Biology
Catia	Barbosa	Universidade Federal Fluminense	Associate Professor
Cecile	Fauvelot	Institut de Recherche pour le Developpement	Doctor
Cecilia	Pascelli	PhD Student	Australian Institute of Marine Science
Cecilie Becyamin		Chair of an NGO	Manonia na Dari Guardians of the Se
celia	schunter	dr	kaust
Cesar	Villanoy	Professor	Univeristy of the Philippines
chancey	macdonald	mr	James Cook University
Charles	Birkelaud	Biologist	UH department of biology
Charles	Young	researcher	univ of hawaii manoa
Charles	Young	President	Kupa-Hookena
Charles Miller		Mr	Stockholm Resilience Center
Charley	Westbrook	Student	HIMB
charo	chipen	ms	uplb
Chavevnmce	Chamchay	student	Ramkhamhaeng University
Chavo	Chipero	Ms	University of the Philippines Los Banos
chelsea	korpanty	phd student	university of queensland
Chelsea	Woke	Scientist	Hawaii DLNR
Chelsie	Counsell	University of Hawaii	Ms.
Cherie	Kauahi	University of Hawai'i at Hilo	Graduate Student
Cherie	Wagner	RR program Coordinator	TNC
Cheryl	Logan	Assistant Professor	California State University Monterey Bay
Chevy	Wai Wong	Master	hku
cheyenne	liddicoote	student	san francisco state
Chico	Birrell	researcher	univ of queensland
China	Yan Wong	Master	SWIMS HKU
Chinmayee	Bhedi	Florida International University, Miami, USA	Graduate student and Teaching Assistant
Chris	Bird	Professor	Texas AM galveston
chris	langdon	professor	univ of miami
Chris	Wall	Phd candidate	UH manoa
Chris	Wild	Professor	University Boewren
christian	gfatter	ms student	usf college of marine science

Christian	Voolstra	KAUST	Professor
Christian	Williams	DR	
Christian Reniche		PhD student	Phillips University Hamburg
Christiane	Hassenrueck		
christin	wuca	Phd	university of hawaii
Christina	Dunyan	PhD	UHM
Christina	Kellogg	Research microbial	USGS
Christoph	Haache	Director	Score International
Christophe	Vieira	IRD	Doctor
christopher	cornwell	dr	university of western australia
Christopher	Cvitanovic	University of Tasmania	Research Fellow
Christopher	Evans	Faculty	Hawaii pacific University
Christopher	Jury	Hawaii institute of marine biology	Postdoctoral researcher
Christopher Gibbons		Mr	VUW
christy	semmens	director science	REEF
Chylene? Hernandez		CIEC specialist	CIEC
cidmi	mallin	PhD student	university of nice
Ciemon	Caballes	PhD	James Cook University
cinb	wiggins		resident
CJ	Gragola	Fundraiser	Freelance
Cl.		Masters Student	stanford univ
Claire	Lewis	PHD student	UH manoa
Claire	Paris	Prof.	UM,
claire	raeymond	post doc	zmt, germany
Claire Lager		MSc	HIMB
Claudia	Galindo	MsC	UNAM(mexico)
Claudia		Leibniz Center for Tropical Marine Ecology, Germany	
Isabella	Pogoreutz		Ms
Claudia Patricia Ruiz Diaz		Dr	Sociedad Ambiente Marina
Clint	Oakley	Victoria University of Wellington	Postdoctoral Researcher
Clint Oakley		Postdoc researcher	Victoria University of Wellington NZ
Clinton	Edwards	Researcher	Scripps
Coleen	Bove	PhD student	UNC chapel hill
Colin	Wen	Assistant Professor	tunghai university
commer	olivia	director	WAG
Connor	Sanborn	Post Graduate	U Miami
Constance M.	Soja	Colgate University	Professor of Geology
Contessa Ricci		Grad student	Univ Texas at Arlington
coregor	audgson	director	reef guardian

Corey	Hanipene	PHD student	University of Waikato
Corinne	Fichs	Phd	UCSB
Cory Krediet		Professor	Eckerd College
courtial	lucile	phd	centre scientifique monaco
Courtney	Klepac	PhD	ODU
Craig	Nelson	University of Hawaii	Assistant professor
Craig Osenberg		Phd	Univ of Georgia
Crawford	Decory	biologist	UM IRSMAS
Criselda	Castor	Ms	DENR, Philippines
Cristina	Linares	University of Barcelona	Dr.
Crow	White	Citizen	
Crystal	Beale	Student	UCF
Crystal	Henkel	Hawaii Pacific University	Marine Scientist
Crystal	mcRae	PhD Candidate	Simon fraser university
Curt	Storlazzi	University of California	PhD
Cynthia	Lewis	Florida Keys Marine Lab	Deputy Director
Cynthia Silveira		Phd	SDSU
D	Koweulc	Post Doc	Carnegie
D	Thomson		SCIRO
Dakota	Floyd	Masters Student	university of san francisco
Dalia	Hernandez	MSc	UOG
Damania Torres-Pullizer		Phd student	Macyonne U
Damaris	Torres-Pulliza	MQ Uni	PHD Candidate
Dan	Burgess	Massachusetts	
Dan	Holstein	PHD	UVI
Dana	Fisco	Nova Southeastern University	Research Assistant
Dana	Hennig	Student	stanford univ
Dana	Kim	PhD	UQ
Dana	Reed		
Daniel	Baker	Mr.	University of Georgia
Daniel	Barshis	Old Dominion University	Assistant Professor
daniel	kam	student	university of hawaii
Daniel	Morishige		
Daniel	Wangprasmin	Research Scientist	University of Copenhagen
daniel	wuitchit	grad student	university of calgary
daniel	harris	dr	marum. University of bremen
Daniel Baker		Mr	University of Georgia
danielle	cloar	ms	univ of victoria
danielle	durham	phd	university of delaware
Danielle Reces		PhD candidate	Temple University



Danny	Zhen	Student	Kapiolani community college
Danwei	Huang	National University of Singapore	Assistant Professor
Daphie	Spring	Student	University of Exeter
Daria Siciliano		Phd	UCSC
Darla	White	special project coord.	DAR Maui
Darlene	Howe		
darren	brown	mr	UNAM
Darren	Coker	KAUST	DR
Darren Colt		postdoc	Kaust
Daryl	Wingsten	Phd	University of the Rykayes
Dave	Bybee	Brigham Young University-Hawaii	Associate Professor of Biology
Dave	Snyder	Senior Scientist	CSA Ocean Sciences Inc
david	combosch	harvard university	phd
David	Delaney	University of Hawaii	Post-doctoral Researcher
David	Fiela	Associate Professor	HPU
David	kowweek	dr	Stanford Uni
David	Manor	Group Leader	JCU
David	Marancik	Fish Vet Group	Aquatic Veterinarian
David	Miller	Professor	James Cook University
David	Obura	CORDIO East Africa	Director
David	Wenster	PHD	University of the Ryukyus
David Kline		Dr	UCSD SIO
David Mouillot		Professor	Univ Montpellier
David Mouillot		Professor	Univ Montpellier
Davide	Maggioni	University of Milano Bicocca, Italy	MS
Davide	Seveso	University of Milano, Bicocca, Italy	PhD
davies	austil spigi	ms	reef guardian
Deanna	Beatty	Ecologist	James Cook University
Deanna	Beatty	PhD	Georgia Tech
Debbie	Langley	Smithsonian Marine Station and Harbor Branch Oceanographic Institute	Former RN, now wxcellent volunteer with graduate level studies and visitor center education
debbie	stantavy	dr.	reef scientist
Deborah	Grochfield	researcher	university of mississippi
Denis	Goulet	Phd	Univ. of mississippi
Denise	McCorry	Dr	



dennis	Yamase	judge	FSM supreme court
Dennis Fujii		Mr	UH
Dennis Hubbard		Prof of Geology	Oberlin College
Derek Hogan		Professor	TAMUCC
Derek Kraft		MS	HIMB
Derek Manzello		Dr	NOAA
Deron	Burkepile	PHD	UC Santa Barbara
Dewi Y.	Satari	Dr	Hasanuddiu uni. Indonesia
Dexter	Dela Cruz	MS	Southern Cross Unviersity
diana	Rodriguez	master student	
Diana M	Beltran	Researcher	University of Puerto Rico
Diana M Beltram		Researcher	UPRM
Diana Morales		Phd Student	Universidad de Guadalajara
Diana Rodruguez		MS	CICMAR
Diane	Kasprzak		
diane	shepherd	DVM	uh maui
Diane	thompson	Assistant Professor	boston university
Dietrich	Hofmann	Ruhr-University Bochum	Dr.rer.nat., emeritus Professor
Dione	Swanson	PhD	Jimahe
dirk	peterson	dr	secore international
Dirk	Releau	PhD	SECORE
dius	de jems	student	up msi
Dominic	brown	mr	university of oxford
dominic	swift	phd candidate	tamucc
donald	potts	professor	univ calif santa cruz
donald	v	director	motetropical research lab
Doni	T.	PHD	university of western australia
Donna	OConnor		
Dorothea	Bender-Champ	University of Queensland	Dr
Douglas	Naliboff	SDSU	
Dries	Van den Poel		
Dustin	Picard	NOAA - FGB NMS	Vessel Operations Coordinator
Dylan	Simonson	Reseacher	DLNR/DAR
Dylan	Waligroski	Student	S hall University
Ed	Smith	post doc	NYUAD
Edward	DeMartini	Hawaii Institute of Marine Biology, University of Hawaii	Affiliate Faculty
Edwin	Hernandez	Affiliate researcher	University of Puerto Rico
Edwin	Lindsey	Polanu' Hiu	Facilitator
Edwin	Lindsey	President	Maui cultural lands
Edwin Ahernandez?		Dr	Sociedad Ambiente Marina

Eike	Schoenig	Researcher	CORE SEA
Eike Schoenig		Researcher	CORE SEA
Eint	Kyi	University of Hawaii Manoa	Graduate student
Eleanor	Aumellanda	PhD student	university of queensland
Elena	George	Research	SDSU
Elena Bollatt		miss	Univ Southhampton
Eli	Meyer	Assistant Professor	Oregon State University
elisa	aller	student	Stockolm university
Elisa	Bayraktaroc	PHD	university of queensland
Eliz	Ting		
Elizabeth	burmester	phd canidate	boston university
Elizabeth	Mared	Climate Scientist	Nature Conservancy
Elizabeth	Mcleod	The Nature Conservancy	Climate scientist
Elizabeth	Walsh	University of Texas at El Paso	Professor
Elizabeth	Hamman	University of Georgia	PhD Candidate
ellen	dow	phd student	Florida International University
ellen	reinbard		stanford univ
elsa	alvear	ms	citizen
ema	camp	dr	university of technology sydney
emilia	sogid	dr	matplanka university
emily	riuest	dr	uc davis
Emma	Doyle	MSc	GCFI
Emma	George	master student	SDSU
Emma	Kennedy	Griffith University	Dr
Emma	Ryan	PhD	James Cook University
Emmanuel	Hanert	Universit� catholique de Louvain	Prof.
Eri	Ikeuchi	MSc	University of Ryukyus
Eri Zkeuchi			University of Ryukyus
Eric	Dilley	University of Hawaii at Manoa	PhD Student
Eric	Treml	lecturer	university of melbourne
Eric	Brown	Dr.	National Park Service
erica	towle	PhD	univ of miami
erik	brush	phd student	uh manoa
Erik	Cordes	Temple University	Associate Professor
Erika	Woolsey		
Erin	Hodel	CSA Ocean Sciences Inc.	Marine Biologist
Erinn	dillon	fellowship	Smithsonian Institute
Erinn	Muller	Staff Scientist	Mote Marine Lab
Eslam Osman		Mr	Univ Essex
Estep	Andrew	Waitt Institute	Science and field manager
Esther C		Associate Professor	George Mason University

Peters			
Eva	Maire	University of Montpellier	PhD student
Eva	Salas	PHD Student	UCSC
Evelyn	Otto	Ms	Palau Intl. coral Reef Center
Eznairah	Nariola	Student	Univeristy of the Philippines
Fabien	DeWolf	Mr	
Fabio	Cortesi	The university of Queensland, Australia	Ph.D.
Federico	Vitelli	Edith Cowan University	Mr
felix	grange	program manager	hawaii department of health
Fernandez Gibrum		Dr	UFABC San Paulo Brazil
Fernando	Bretos	Director	The Ocean Foundation
Firstname	Lastname	Org	Director
Fishiki Kubura		MSc	University of the Ryukyus
Florian	Roth	MSc	KAUST
Forest	Rohwer	SAN DIEGO STATE UNIVERSITY	PROFESSOR OF BIOLOGY
Forrest	Law	Student	Santa Monica college
Francis	Joyce	UC Santa Barbara	project scientist
Fran-Claas	Dajka	Msci	U Bremen
Francois	Seneca	University of Hawaii & Smithsonian Institution	Postdoctoral fellow
Frank G	Stanton	PhD	Leeward CC U H
Franscesca Gizzi		PhD	Univ of Bologna
Franzistea	Elnes	Ms	Vuw new zealand
frederico	suhan	student	uplb
Frida Diaz		Researcher	SOMAC
G D	Stanely		Smithsonian
G Sherry	Ngirmeriil	Associate Professor	Palau Community College
GÃ¶ran	FrÃ¶st		
Gabriel	Grimsditch	IUCN	Senior Project Officer
Gabriela	Nalia	MSc	Oceanos
Gail	Grabowsky	Chaminade University	Environmental Studies Program Director
Gal	Eyal	Tel-Aviv University	PhD candidte
Garavelli			
Lysel		postdoc	FAU
Garrett Johnson			HIMB
Gator	Halpen	Founder	Coral vita
Gavin	McDonald	University of California, Santa Barbara	Project Researcher
gebian	amargo	phd	
Geoff	Mitchell	Wofford College	Assistant Professor of Biology



Geoffrey	Jones	James Cook University	Professor
Geoffrey	shideler	ms	university of miami
George	Ruff	Dr	univ of queensland
George	Stanley	Dr	university of monterey
George Stanley		Professor	Univ Mactars
georgia	torras	phd	James Cook University
Georgina	Ramirez	technician	CICEST- mexico
Geory	Merelo	Mr	PICDC
Gerianne Terlaw		student	UH Manoa
gewn	barry	student	cabrillo college
Ghoida	Hadidi	PHD	KAUST
Gibram	Fernando	Professor	UFABC Brazil
ginny	krone	interperter	James Cook University
Glenn	Velsecs	Graphic Designer	WCC
Goielle	Legrns	PhD	UPF
gordon	byron	student	kaust
Gorgue Cortes		researcher	costa rica universidad
Gorinola	Lienort	researcher	james cook university
Grace	Sanders	ms	JCU
Grace	Frank	Ms	JCU
gracie	cumming	professor	jcu
granicharska	yanikza	miss	uh manoa
Greg	Torda	Dr	Eiu Coecrs
Greg Falcon		BS student	TAHMUCC
Gretchen Goodbody-Gringley		Asst Professor	BIOS
Griselda Siela S?		Associate Professor	George Mason University
Guillermo	Holria	DR	Coral Guardian
Guillem Banc-Prandi		student	Mote Marine Lab
Guillerme	Longo	PhD	UFRN, Brazil
guillermo	holzer	mr	coral guardian
Gunilla Baum		postdoc	ZMT Bremen Germany
Gurilla	Baum	PhD	ZMT Bremen
Gus	Watha	Mr.	
gus	robertson		tnc
Hajina	Kayanne	Professor	University of Tokyo
Hanae	Spathias	University of Puerto Rico	Graduate Student
Hanke	rentir	Dr	Imt bremen Germany
hannah	epstein	phd candidate	JCU
hannah	markham	ms	uq
Hannah	Nelson	MS Student	CSUN



Hanulco	Kake	Biometrician	hawaii
Harmony	Hancor	PhD student	Old Dominion University
Harriet	Nash	Dr	
harry	lynch	mr	tnc
Harry	Nelson	Fluid Imaging Technologies	Vice President
Harry	Clarke	Mr.	UWA
Hazel	Arge	prof	Univ of the pitias
Heather Page		PhD student	UCSD
hector	kareiy	professor	ucla
Hector	Mayo	PhD	USC
Heidi	hersh	resident	hawaii
Heidi	Hirsch		stanford univ
Heidi	Weid	PHD	EPITe
Henrich	Bruggermann	Dr.	University Reunion
Hide	Yamamoto		ECOH Corporation
hideyuki	yamashino	dr	univ ryukyus
Hiroki	Kise	MsC	University of Ryukyus
Holger	Arllergy	PhD	KAGST
Holger Ailany		PhD	UALEST
Holly	Bik	University of California, Riverside	Assistant Professor
Holly	Bolick	Bishop Museum	Invertebrate Zoology Collections Manager
Honour	Booth	Student Researcher	University of Hawaii at Manoa
Howard	jasper	professor	university of buffalo
Hue	Yig	Scientist	ANU
Hugo	Harrison	James Cook University	Dr
Hussein	Zahir	Director	Suell Island Research Center
Hzrokz	Kzse	MS	University of
iaian	caldwell	post doc	HIMB
Ian	Lundgren	Federal US Government Employee	Natural Resource Management Specialist
Ian Enochs		scientist	RSMAS University of Miami
Ian? Kawamura?		Phd Student	Univ of the Ruykes?
illegible	name	student	Hawaii
Ilsa	Kuffner	US Geological Survey	PhD
Ines	Galtier d Auriac		
Inga	Conti-Jerpe	PHD student	hku
Ingrid	Knapp	Hawaii institute of Marine Biology	Dr
Ingrid	Knopp	PhD	Uh Manoa
Ira	Cooke	Scientist	James Cook University

Isabela	Seibilty	Student	Federal University of Rio De Janeiro
Isabela	silvia	professor	university of curio
Isael Ortega		PhD	Mexica University
Isavel	Nunez	Master Student	
Ivan	Erdel	CEO	Ecotone
J.P.	Canicait	Dr	Unam, Mexico
J.R	Perez	Marine biologist	UNAM
Jaaziel	Garcia-Hernandez	University of Puerto Rico - Mayaguez	Graduate Student
Jaazul Garcia	HacGoudes	MsC	UPR Mayaguez
Jack	Buchanan	Msci	ODU
Jack	Koch	Oregon State University	PhD Student
Jack	Laverick	University of Oxford, UK	Mr
Jacob	Eurich	Phd candidate	James Cook University
Jacob	Johan	PhD	UT Austin
Jacob Eurich		Phd Candidate	James Cook
Jacqueline	Padilla-Gamino	University of Washington	Assistant Professor
Jade	Deleyaux	researcher	UCSC
JAIME	GONZALEZ-CANO	CONANP-SEMARNAT	DIRECTOR PROTECTED AREA
Jake	Allgerer	phd	u washington
James	Murphy	University of Hawaii at Manoa - Kewalo Marine Laboratory	Graduate Researcher
James	Reimer	University of the Ryukyus	Associate Professor
James	Ryan	California State University Monterey Bay	Student
James	robinson	Mr	university of victoria
James J Herlan		grad student	ESMOI-UCN (Chile)
James Robinson		PhD candidate	University of Victoria
James W.	Porter	University of Georgia	Meigs Distinguished Professor of Ecology
Jamie	McWilliam	PhD	CMST
Jamie McDevitt-Irwin		student Univ Victoria	
Jamie Szklay		Phd Student	UHM
Jan Bruewer			Kaust, Saudi Arabia
Jane	Cusack DiCenzo		
Jane	Hawkridge		Dr
Jane Wong		Ms	Univ Hong Kong
Jang In Ju		business owner	Handi Handicraft
Janice	Louek	Dr.	Aims
Janie	wulff	Dr	florida state university

Janine	Kohe	MsC	2MT Germany
Janjira	kumdeengerm	miss	Choula thailand
Jannet	Herring	Home Maker	UNCW
Jannet	rohe	msc	centers of tropical marine ecology
Janrira Kumdecngern		postdoc	Chula Thailand
Jarrood	Loerzel	NOAA	Social Scientist
Jarrood Lorezel		Environmental Social Scientist	NOAA
jason	flower	mr	university of queensland
Jason	Mehlinger	Education specialist	DAR-Oahu-Education
Jason Philibotte			NOAA
Jasper	Loes	Assistant Professor	University of Amsterdam
javier	bueno	researcher	UOG
Jay Fisch		PhD student	RSMAS University of Miami
Jean	Janss	Professor	WCC
Jean	Kenyon	U.S. Fish & Wildlife Service, retired	Inventory & Monitoring Specialist
Jean-Baptiste Jouffrey		Mr	Stockholm Resilience Center
Jean-François	Flot	Université libre de Bruxelles	Associate Professor
Jeff	Miller	National Park Service	Fisheries Biologist
Jeff	Shimg	Professor	victoria university
Jeffrey	Mossisa	Political Geographer	JCU
Jeffrey	Munar	Masters Student	UP-MSI
jeiger	muuiz		protectore de cuencas puerto rico
Jemi Santiago-Valentine		Phd Student	Universidad de Guadalajara
Jen Davidson		Master BA	HIMB
Jenn	Wong-ala	student	UHM
Jenna Budke		Ms	Univ HI Hilo
Jennifer	Caselle	University of CA Santa Barbara	Facultu
Jennifer	Derby	Supervisory Life Scientist	US EPA
Jennifer	donelson	dr	jcu
Jennifer	Lappin	ARC Centre of Excellence for Coral Reef Studies	Chief Operations Officer
Jennifer	Mccable	Faculty	The lovett, school
Jennifer	Montalvo	on-call worker	UH
Jennifer	Polinski	Harbor branch oceanographic	Graduate student
Jennifer	S	Professor	Scripps Oceanography
Jennifer	Salerno	George Mason University	Ph.D.
Jennifer Sneed		biologist	Smithsonian
Jenny	Mytron	Env. Eng	Guam
Jenny C	Looluquey	PhD	UABCS, Mexico



Jenny Carolina	Rodriguez	Post Doctoral Researcher	UABCS - Mexico
Jeremiah	Jarrett	Professor	CCSU
Jeremy	Jackson	Scripps Institution of Oceanography	Professor of Oceanography Emeritus
Jeremy	Sofonia	PhD	University of Queensland
Jeremy	Goldberg		James Cook University
Jeroen Van De Water	Dr		
Jessica	Bellworthy	University of Southampton	Ph.D. Student
Jessica	Bouwmeestr	post doc	Qatar Uni
Jessica	Carilli	UMass Boston	Assistant Professor
jessica	hintzsche	student	HPU
Jessica	Lotts		Marine Journalist Intern
Jessica	Cheok	PhD Student	James Cook University
Jessica	Deblieck	student	university of guam
Jessica	Leig	Manager	Coral restoration foundation
Jessica Bellworthy			Univ Southhampton
Jessica Bouwmeester		Postdoc	Qatar Univ
Jessica Gradyan		student	Univ Guam
Jessica Sevilla		undergrad	UH Manoa
jeung	narida	student	upmsi
Jhoset	Burgos	Lawyer	UPR
jim	cooper	dr	
jim	scheuter	student	unam
jin-si	over	student	unc wilmington
Joana	Figueiredo	Nova Southeastern University	Assistant Professor
joanna	murray	researcher	cefas, UK
Jody	Webster	Associate Professor	U Sydney
Johanna	Calle-Trivino	Phd Student	Cinvestan-Mexico
John	Buchanan		ODU
John	Foster	UH Law School Legal Fellows Program	DOCARE Legal Fellow
John	Gorman	Maui Ocean center	Curator
John	kester	researcher	UCSC
John	Knowles	The Nature Conservancy	Conservation Information Manager
John	Lumsden	University of Guelph	Professor
John	McManus	University of Miami	Professor
John	ogoen	eneritos prof	usf usa
John	Pandolfi	The University of Queensland	Professor
John	Parks	Marine Management Solutions	Executive Member



john	Artin	Phd candidate	Arbuser state university
john	Burns	Researcher	Himb
john	kittinger	Senior Director	Conservation International
john	Ladyn	Director of Department of Environment	Moni
john	runice	dr	Aquation LTD
john	Veua	Dr	CRR australia
John Smith		researcher	University of ?
Jon	Witman	Brown University	Professor of Biology
Jonas	PÃ¥lsson	World Maritime University	Dr
Jonatha	Giddens	University of Hawaii	PhD candidate
Jones	Raynal	Mr.	American Samoa
jordan	coertze	Dr	curtan univesity
Jordan	matley	mr	james cook university
Jordan	West	Dr	private citizen
jorge	brenne	director marine science	tnc
Jorge	CortÃ©s	Universidad de Costa Rica, San JosÃ©, Costa Rica	Researcher and professor
Jorge	Lienoir	Ing	Ghost University?
Jos	Hio	assoc. programs director	coral
JosÃ© Carlos	Sicoli Seoane	Federal University of Rio de Janeiro	Associate Professor
Jose	Borrero	University of Southern California	Adjunct Assistant Research Professor
Jose	Lopez	professor	nova southeastern university
Joseph	Pawlik	University of North Carolina Wilmington	Professor
Joshua	Levy	Mr	UH manoa
Joshua	Patterson	University of Florida	Assistant Professor
Joshua	Voss	FAU Harbor Branch Oceanographic Institute	Assistant Professor
Josue Nararro		Mr	Sociedad Ambiente Marina
Joy	Smith	Ms	AIMS
joy	Smith	phd student	Australian Institute of Marine Science
juan	braga	professor	university of granada
Judith	Lang	PhD Student	AGRRA
Jules Kittelsen			Univ Calgary
Julia	Baum	University of Victoria	Associate Professor Biology
Julia	Hagemeyer		
Julia	Strahl	Post Doc	University of oldenburg
Julie	Burgess		
Julie	Kuo	Hawaii Department of Land	Ballast Water and Hull Fouling

		and Natural Resources	Coordinator
Julie	Meyer	PhD Student	University of Florida
julie	zill	student	uh manoa
Juliet	Loutus	Biologist	MBARI
Juliet Hernandez		Specialist	SNAP
Jun	Cheng	MS	The Nature Conservancy
Justin	Miyano		university of hawaii
Justin	Rivera		
Justine Kimball		PhD	
K	Bahr	Dr	HIMB
K	Hillyer	Dr	VuW
K Petersen		CEO	Fluid Imaging
Kailani	clark		
Kailash	Cook		Byron Bay High School
Ka'ilikea	Shayler	NOAA/Hawai'i DLNR	Hawai'i Coral Fellow
Kaim Taihun		PhD Candidate	Univ Hong Kong
Kaipo	Dye	Ms phd candidate	Uhm
Kanoe	Morishige	PhD student	UH Manoa
Kanoe	Steward	TNC Fellowship	TNC
Kanoelani	Steward	TNC marine fellow	TNC
Kaonuko	miyakuni	proff	univ of the ryukyus
Karen	Bryan	Commercial Aquarium Fisher	UH
Karen	Burke da silva	Flinders university	Associate professor
Karenne	tun	resource management	singapore national parks board
Karl	Castillo	PhD	UNC Chapel Hill
Karla Parsons Hubbard		Prof of Geology	Oberlin College
Karsten	Shein	Climatologist	NOAA
kate	fraser	student	UCI
Kate	furby	phd student	ucsd
Kate	Lunz	Assistant Researcher	FWRI
Katherine	Dziedzic	phd student	oregon state university
Katherine Sharp		PhD	Roger Williams Univ
Kathleen	Sealey	Associate Professor	University of Miami
Kathleen	Burgess		
Kathrine	dougan	Marine biologist	Florida International University
Kathryn	Lohr	University of Florida	
Kathryn	Shulzitski	University of Miami RSMAS	Assistant scientist
Kathryn Berny		Phd	JCU
kathy	chenette		
Kathy	Morrow	Post doc	UNH
Katia	Capel	MSc	UFRJ, Brazil

katia	chikasaya	student	uh hilo
Katia	Nicolet	James Cook University	MSc
katie	cramer	phd	Scripps inst of Oceanography
Katie	Lubarsty	MS	HIMB
Katie	Peterson	Phd Student	ARC Coe
Katie Sambrook		PhD student	James Cook Univ
Katrina	Munsterman	Student	UCSB
katy	miller	director	vatnvara foundation
Keith	Spring	CSA Ocean Sciences Inc.	Senior Scientist
Kelli	O'Donnell	University of Florida Student	
Kelly	Gomez	Student	Penn state
Kelly	Hood		
Kelly	Latynhauers	Marine Biologist	scripps/ carmabi
Kelly	Speare	Phd Student	UCSB
kelsey	sanborn		university of sydney
Kelton	McMahon	Assistant Research Faculty	University of California, Santa Cruz
Kelvin	Gorospe	Scientist	NOAA-PIFSC
Ken	Sexton	The Sexton Corporation	Founder and President Emeritus
kenneth	gale	operations manager	klcs belize
Kent	Carpenter	Professor	Old Dominion University
kent	peterson	ceo	fluid imaging
keren	landow		
kernie	frasier	phd student	UQ Australia
Kerry Cameron		PhD	Southern Cross University, AUS
Kevin	Ford		
kevin	Foster		
kevin	wong	research assistant	Bermuda Institute of Ocean Science
Kim	Falinski	The Nature Conservancy	Marine Scientist
Kim	Mah		
Kim B Ritchie		PhD/Asst Prof	UC Benefort
Kimberly	Edwards	NOAA	Marine Biologist
Kimberly	McComas	Scripps Institution of Oceanography, UCSD	Graduate student
kirait amon	lewis		
Koeio	Gaiela	Biologist	
Kosta	Stamos	Grad Student	uh manoa
Krishna Pillai	PADMAKUMAR	Pro Vice-Chancellor, Kerala University of Fisheries and Ocean Studies, Kochi, India	Professor
Kristen	Davis	University of California, Irvine	Assistant Professor



kristen	gloecker		university of hawaii
Kristen	Marhaver	PHD	
Kristen	Stewart	SUNY-ESF	Senior Research Specialist
kristen	weiss	post doc	stanford univ
kristina	tieljen	ms	univ. of victoria
Krustopher	Bengon		
Kuulei	Rodgers	researcher	Hawaii institute of Marine Biology
		Biodiversity Reseach Center, Academia Sinica, Taipei, Taiwan	
Kwang-Tsao	Shao		Reseach Fellow
Kyle	Morgan	post doc	Exeter University
Kyle	Neuman	PhD	UCSB
Kyle	Van Houtan	Monterey Bay Aquarium	Science Director
Kyle	Zawada	PHD	Macquarie University
Kylie Simmonds		Comms Mgrs	CoralCOE
Lacy	Pincinich	student	SHU
Laddawan	Sovngsawang	Student	Shizuoka University
Iahela	garst	grad student	
Lara Jwanicki		MSc	Yale
Larry Herman		volunteer	MOTC
Laura	Causey		
laura	marangoni		
laura	myalarz	Associate Professor	UT Arlington
		Smithsonian Tropical Research Institute (STRI)	
Laura	NÃ±ez Pons		Postdoctoral Researcher
Laura	Puse	msc	university of queensland
Laura	Richardson	PHD student	JCU/ARC
Laura	Rix	PhD	Geomar
Laura	Tatro		
Laura Mae	Hinson	Texas A&M Student	
		One of the millions of inhabitants on this earth	
Lauren	Miller		I am Woman
Lauren	Stefaniak	Postdoctoral Association	George Southern University
Lauren	Fess		UT Arlington
Lauren	linsmayer	Ms	Scripps inst of Oceanography
		Chinese Academy of Sciences / ARC Centre of Excellence for Coral Reef Studies	
Laurence	McCook		Dr
Lauri	Scherr	PhD	VIMS
Lauric	Thiaull	PHD	Paris University
Laurie	Chisholm	University of Wollongong	Assoc/Prof
Laurie	Raymundo	PhD	U of Guam



laurile	dabum	student	up- diliman
Lauron	Nadlex	PhD	JCU
leah	meth	researcher	stanford woods
lebaron	phillipe	prof	universirty of paris
Leccriala	Byaran	MS	EPFL
Leila	Ezzat	PHD student	
lennin	floret	msc	u de antigua
lennon	thomas	researcher	
Leomir	Diaz	The Marine Science Institute, University of the Philippines	Research Assistant
Leprieur		Associate Professor	Univ Montpellier
les	k	professor	boston university
Leslie	Henderson		
Levi	lewis	Researcher	UCSD-Scripps
Liane	guild	research scientist	nasa
Lianne	Jacobson	PhD candidate	UF
Lida	Teneva	Conservation International	Science Advisor
Liesel	Robbins	Student	UH Manoa
Lihlu	Nouri	Doctor	Hawaii Conservation
Lilia	Bullock		
Liliana	Clarke	PHD student	University of Waikato
Lin	Bozic	Post Doc	University of Queensland
Lina	guttierrez	researcher	univ of los andes-colombia
Linda	eggerton	ms	university of rio de janeiro
Linda	Mundt	friend of the Earth	
Linda Blackall		Prof	Suriburne Univ
Linda Kelly		prof of microbiology	SDSU
Lindsay	Bonito	Biologist	Scripps Oceanography
Lindsay	Veazey	Hawaii Institute of Marine Biology	
Lindsay	Spiers	Ms	University of Florida
Lindsay Veazy			HIMB
Lindsey	Deignan		
lindsey	kramer	data analyst	dar, pcsn
Lisa	Carne	Executive Director	Fragments of Hope
Lisa	Rodrigues	Associate Professor	
Lisa	Wedding	Center for Ocean Solutions	Research Associate in Spatial Ecology and Analysis
Lisa	Bosrom	Ms	JCU
lisa	lobel	prof	wheelad college
Lisi	Esherick	Gran Student	stanford univ
Liz	Goergen	Research asst	Nova Southeastern University

Liz	Kumalad	Biologist/educator	UH
Liz	Parissenti	OneReef	US Program Manager
Liz	Tera	Protected area advisor	Micronesia
Liz	Terk	Protected Area Advisor	FSM Government
Liza	roger	Marine Scientist	UWA- Perth
Lizz	Hunt	Masters Student	TNC
lorenzo	alvarez	mr	unam
Lorenzo	alvarez filip	Dr	VNAM
Lorna	Wilkinson	Masters student (Newcastle University)	Miss
Lorna Wilkinson		Miss	Newcastle Univ
Lorraine	Ling	post doc	Stanford Uni
Louis Buccella		MS student	Univ Buffalo
Louise	Economy	University of Hawai'i at Hilo	Graduate Student
Lu	Sun	PHD student	Kaust
Lucas	Terrana	University of Mons, Belgium	
Luceiemre	Scre	Communications	the nature conservancy
Lucy	Georgiou	University of western Australia	Miss
Lucy Alarcon		Phd	Universidad de Guadalajara
Luis	Caldov	Dr.	CLCESE
Luis	Gomez	Griffith University	Msc
luis	sivescun	student	unam
Luis	Suescun	Student	UNAIU
Luis	Gueveri	PHD student	PSU
Luis E	Calina	PHD	
Luisa	Marcelino	Northwestern University	Research Assistant Professor
lupita	ruiz-jones	post doc	stanford
lyca	mani bozec	professor	university of queensland
lydia	ten	research associate	University of British Columbia
Lynne	Hazelip		Geologist
Lyza	Johnston	Biologist	CNMI BECQ
M	Pinmero	phd	Cal Academy
M Yayat Afanso		MSc	Rare Indonesia
M.	Afianto	MSC	rare indonesia
M. Zahirul Islam		biologist	Marine Life Alliance, Bangladesh
MÃjrcio	Coelho	University at Buffalo	PhD Candidate
maac	humbuet	dr	nagoya university
Maddie	Anzivino	Graduate	UHM
Madeline	Emmas	MSC student	KAUST
Madelyn	Raycroft	Master Student	Cal Poly SLO

madhavi	patterson		sydney university
Mads	Lichtenberg	PhD	UCPH
Mae Hinson		undergrad	Texas A&M
Magalla ?		PhD	Scripps
magen	cryner	Phd student	kaust
Maggie Johnson			Scripps
Maggie Sogia		postdoc	HIMB
Maggy	Nugues	EPHE	Dr
Mags	Quibilas	PHD student	UP MSI
Maha	Kalil	Dr	kaust
Maha Joana	Cziesielski		
		Departamento de Geoquimica	
		Universidade Federal	
		Fluminense, Brazil	PhD student in Coral reef ecosystem
Mahdi	Moradi		
Makani	Gregg	Teacher	UH Hilo
Maliu	Naumann	Doctor	Uni Bremen
Mallory	riuest	PHD student	UCSB
		coral reef and coastal restoration	
Malou	Born		cand.scient
Manuel	Gonzales	Dr	univ of queensland
Manuel Meija			Maui Nui Makai Network
Marc	Slattery	Professor/Marine ecologist	James Cook University
marcia	ford	data manager	university of west indies, jamica
marcia	Palacios	Phd Student	JCU
Marcio			
Loelho		Phd student	Univ Buffalo
marcos	sofas		queensland university
Marcus	Peny	PhD student	uh manoa
Mareen	Moller	PHD student	Oldenberg University
Maren	Mola	PhD Student	Oldenburg
Maren	Zeigler		Kaust
margaret	malone	ms	university of illinois
Margaret	Wilson	MS	UCSB
Margaux	Hein	miss	JCU
Margert	Miller	Research Ecologist	
Maria	Dillard	Social Scientist	NOAA
Maria	Rodriguez	PhD	
		The University of the West Indies, Barbados	
Maria	Pena		Project Assistant
Maria Cortes-lava		Ms	Universidad de Guadalajara
Maria Gomez	Cabrera	PhD	University of Queensland
Maria Lopes		Ms	NOAA



Maria Vega Rodriguez	Mrs	Univ South Florida
Mariana Alaverz	PHD	JCU
Mariana Bender	PhD	UFSC Brazil
Mariana teschima	phd	ufrs
Maribeth Gidley	Assistant Scientist	University of Miami
Maricor Soriano	Dr	NIP IP Diliman
Marie-Lise Schlappy	biologist	University of the Highlands of Islands
Marielle Dube		
Marika Haeggman	Stockholm Resilience Centre	Communications
Marilyn Key	researcher	Fresno State
Marina Alvarez Phd	Phd	James Cook Univ
Marine Gouezo	Picrc	Researcher
marion bacabal	student	uplb
Marisa Swiderski		
Mariska Weijerman	JIMAR - University of Hawaii at Manoa	Coral Ecology Researcher
Marissa Stein		
Marji Puotinen	Australian Institute of Marine Science	Spatial Ecological Data scientist
Mark Cunningham	Student	Punahou
Mark Eakin	Oceangrapher	
Mark Hixon	Prof	UH
Mark Ladd	Student	UCSM
Mark Ladel	Student	UCSB
MARK Little	SDSU	PhD student/lab manager
Mark Mccauley	Grad Student	university of mississippi
mark patterson	dr	northeastern university
mark priest	student	university of queensland
Mark Vermei	prof.	university of amsterdam
Mark Warner	researcher	univ of delaware
Mark Schrope	Director	Schmidt Marine Technology Partners
Marla Eggertsen	PhD student	Stockholm University
marlyn phady	ms	BMB- deur
Marsha Remita	Phd	
Marteen Stuhr	MS	ZMT, Bremen
Martha A	PHD student	UQ Australia
Martha Newell		UH manoa
Martin Colocaudro	Biologist	
Martin Helinkampf	Dr	univ of hawaii hilo
Martin Helmkampf	University of Hawaii at Hilo	Dr.



Martin	Prince	Student	JCU
Martin	Sayrr	prof.	SAMS
Martin	Wong	master	hku
Mary	Hagedom	PH.D	Smithsonian Institute
Mary Alice	coffrath	prof	univ of buffalo
Maryjune	Cabiguin	The Marine Science Institute, University of the Philippines- Diliman	Research Assistant
masmai	obuchi	post doc	univ ryukyus
Mat	Nomain	CAN/OSDUTA	UTAS
Mateo	Lopez-Victoria	Universidad Javeriana Cali	Dr.
Mathias	Walin	Coral Guardians	Producer
Mathieu	le henoff	Dr	U miami
Mathieu	Mongin	Scientist	CSIAD
Matt	Lybolt	Tetra Tech	Dr.
matt	mittchell	phd	usak
Matt	Tioholil	Student	KAUST
Matthew Nitschke		Dr	Univ Technology Sydney
Maureen	Ho	Master Student	CSUN
Maurice	Knight		Marine Policy Advisor
Mauricico	Lopez	Research asst	Nova Southeastern University
Mauricio	Rodriguez Lanetty	Professor	Florida International University
max	kaplan	WHOI	PhD candidate
Maximilian	Schweinaberg	Pos Doc	Riha University
May	Roberts	UC Santa Cruz	
Maya Lobel		student	BU
Megan	Morikawa	Stanford University	PhD candidate
melanie	dudley	outreach specialist	DLNR/DAR
melanie	mcfield	dr	healthy reefs
Melina Rodijing		MSC	Univ de Valle
Melissa Rocker		PhD	JCU
Mellissa	Roth	PhD	UC Berkeley
Mia	Comers	Research Scientist	American Samoa EPA
Mia	Thomas	St. Lawrence University	Coral research student
Mia	Hoogenboom	James Cook University	Dr
Michael	Berumen	KAUST	Associate Professor
Michael	Jous	Professional	Smithsonian Institute
Michael	Kinsifor	professor	
Michael	Lesser	Dr	Univ. New Hampshire
Michael	Odisaikuiku	Dr	NYUAD

Michael	Webster	Executive Director	Coral Reef Alligance
Michael	Wooster	masters	Bios/Kaust
Michael	Kamera	student	SCU
Micheal Studivan		Mr	FAU Harbor Branch
michelle	achlatis	phd student	university of queensland
Michelle	Johnston	NOAA	Biologist
michelle	marvier	professor	standa clara university
Michelle	Paddack	Assistant Professor	SBCC
Miguel	Cioria	Biology	Oceanus
Mike	Chapman	Oceangrapher	Mello INC
Mike	Feeler	Marine Ecology	NPs
Mike	Fox	PhD candidate	scripps institute oceanography
MIKE	GAWEL		
Mike	Henley	Smithsonian / Univ. of Hawaii	PhD Student
Mike	Salter	Post Doc	Exeter University
Mike			
Chapman		Mr	MECCO
Mike Fox			Scripps
mikhael	tandez	student	University of the Philippines
Mikolaj	Zapalski	University of Warsaw, Poland	Dr.
Mildred Quin??		student	
Milton Kenneth Gale		Operations Manager	Glovers Reef Belize
Mira	maruir	student	Palau Community College
Miranda	Camp	DR	Stetson University
Miriam Reveter		Phd student	CRIOBE
Miriam Schulter		postdoc	ICMC UNAM
Misaki	Takabayashi	Prof	UH Hilo
misha	jannard	founder	vatnvara foundation
MJ	Olascoaga	Associate Professor	RSMAS University of Miami
		University of California Santa Barbara	
Mohsen	Kayal		PhD
Mohsen Kayal		PhD	UC Santa Barbara
Molly Scott		PhD student	James Cook Univ
Monette	Brauner		
monika	frasier		uh hilo
Montana Hodges		PhD Geology	Cuba Community College
Montaphat	Thummasan	student	Ramkhamhaeng University
Montserrate Landero		Phd Student	Lurtin Univ?
Moon	Sang	Dr	KLOST
morgan	larimer	student	college of charleston/ noaa
Morgan	Winston	Masters student	HIMB
Mugo	Lienorst	MS	

murina	clark		
N	Kolule	Student	NSU Florida
Nadia	Bood	Reef Scientist	World Wildlife Fund
Nadia	Santodomingo	Dr	
Nadia Bood		Reef Scientist	World Wildlife Fund
Nakoa Goo		Marine Fellow, TNC	The Nature Conservancy
Naminrit	Chinfak	masters student	chulalongkorn univ/ thailand
Nancy	Dolgen	Biologist	Independent
Nancy	Jaavedra	Prof	UAS Mexico
Nancy	Senior	Earth inhabitant	Mother
Nancy	Tersa	PHD	University of Alfanzo
Naneng	Setiasih	Advisor	Reef Chece F. Indonesia
Naoko Isomura		Assoc Prof	Okinawa College of Technology
Naomi	Gardiner	James Cook University	Dr.
Naomi	Huntley	university of Michigan	
Narrissa	Spies	Kewalo Marine Laboratory	Graduate Assistant
Nat	Zabashihu	PhD	university of the kyalous
Natalie	Summers	project coordinator	reef conservation maui
Natalie Roset		MsC	Univ Southhampton UK
Nathan	Cook	GBRMPA	Mr
Neil	Maginnis	master student	u copenhagen
Neil	Westgarth		Mr
Nichole	Price	Bigelow Laboratory for Ocean Sciences	Senior Research Scientist
Nick	Aumnermer	Student	UPRM DMJ
Nick	Schizas	prof	urrm
Nick	Shizas	phd	u puerto rico
Nick	Williams	Student	
Nicki Wangthephrant		MsC student	Dmalangkaren Univ
Nicola Allison		lecturer	University of St Andrews UK
Nicolas	Duprey	Dr	hku
Nicolas	Eversa	PhD	U of Queensland
Nicolas	Faivre	Solar	Engineer
Nicolas	Strikis	Departamento de Geoquímica da Universidade Federal Fluminense, Brazil	phd, professor
Nicolas Duprey		postdoc	FAU
Nicolas Evensen		PhD Candidate	Univ Queensland
Nicole	Burns	Ms Student	U of Guam
nicole	loiseau	phd	upf



Nicole	Nakamara	Student	UH
Nicole	Pederson	scientist	scripps inst. of oceanography
Nicole Kogerty		prof	Nova SE Univ
Nils	RÃxdecker	KAUST	PhD Student
Nita	Rykminasam	PhD Student	Hasanuddiu uni. Indonesia
Nithiyaa	Nicaman	masters student	Unversity Sains Malasya
Niti	Wongthepramnit	Msc	" " university
Noelle	van der Straaten		
Noga	Stambler	Israel	Dr
Nora	Kandler	Student	victoria university of wellington
Norievill	Espana	Conservation Officer	University of the Philippines
norman	quinn	researcher	
Nu Ang		Mr	Cuag Hagkep
Oda	Waluelana	miss	JCU
Oda Woldelon		student	JCU
Orpha	Bellwood	James Cook University, Australia	Dr
Oscar	Pizarro	University of Sydney	Senior research fellow
Ove	Hoeahoudber	prof	univ of queensland
Paloma	Matts	PhD	USYD
Paloma Matis		PhD student	UTS
Pam	Bongaerts	post doc	UQ
Pamela Lotu Fuji		Mrs	KUA/Ewa Limu Project
Patricia	Bradley	TetraTech	Senior Ecological Consultant
Patricia	Gayaly	Director	University of the Valia Coba
Patricia	Goddard Hicks	Citizen	
Patricia	Ventura	Student	University of France
Patricia	Waikel	Florida International University	Graduate Student
Patrick	Cockett	Mr	Hawaiian
Paui	Carvalho	Mr	Cal Poly
paul	jines	post doc	university of miami
Paul	Jobsis	University of the Virgin Islands	Director of the Center for Marne and Environmental Studies
Paul	Kench	prof	U of Auckland
paul	Long	Professor	Kings College, UK
Paul	DeSalles	UC Santa Barbara	Staff scientist
pauline	perez	student	uplb
Paulo	Mauaw	NOAA Corsi HI	NOAA
Paulo	Mazain	Coord	NOAA



Pavel	Dimens	PHD student	university of mississippi
pedro	pereia	dr	
pedro	Peria	Phd	
Pedro	resas	scientist	univ. de guadalajara- mexico
Pedro	Silva	Doctor	JCU
Pedro Medina		Phd Student	Universidad de Guadalajara
Pedro Pereiva		Dr	JCU
peter	cowman	researcher	James Cook University
Peter	David	masters student	Macquarie University
Peter	Doherty	AIMS	Dr
Peter	Eoliores	Social Scientist	NOAA
Peter	Glynn	teacher	crane day school
Peter	Harrison	Southern Cross University	Professor
Peter	Honi	ass. Prof	U of Guam
Peter	Schupp	University of Oldenburg, Germany	Professor
Peter	Waldie	Mr.	JCU
Peter F	Sale	Univ. of Windsor, Canada	Distinguished University Professor
Peter W.	Glynn	Prof. PhD	Univ. Mizmi
Petra	Lundgren		Dr
Peyton R.	Williams	Ltc	Eyes of the reef
Phil	McGillvory	Scientist	US Coast Guard Pacific Area
Philip	Kushlan	University of Miami	
Philipp Lewis		Dr	Stanford
Philippe	Lebaron	University Pierre et Marie Curie, Paris	Professor
Phillip	Alves	Post Doc	Stanford
Phillip	Tiebohl	PhD	MIT
Phoi	Tran	UC Berkeley	PhD
Pia	Kegler	Dr	ZMt,Bremen, Germany
Pilar	Garcia	PhD	U Magdalena
Pincelli	Hull	Yale University	Assistant Professor
Pinchen	Chen	Phd student	tunghai university
pollyanna	fisher-pool	noaa	bioacoustician
PONNAKULA M	THOMAS RAJAN	Zoological Survey Of India	Yes IN INDIA WE HAVE 200 NAUTICAL MILES FOR THE EEZ
Pothin	K	Director	MPA of Reunion Island
Povla Cubia Raja		PNG	PNG
Pua Kare		teacher	Trinity School
Rachael	Roehl		UH Manoa
Rachael	waters	senior program officer	vulcam
Rachael	Woods	PhD candidate	Macquai university

Rachel	Dacks	University of Hawaii at Manoa	PhD Student
Rachel	Levin	Researcher	UNSW Sydney
Rachel	Pears	manager	GBRMPA + CICBI
Rafael	Aravjo	Editor	University of Miami
Ramon de Leon		MSc	Reef Support
Randi Rotjan		Chief Scientist, Phoenix Island Protected Area	NEAQ
Rayya	Hadad	Post Graduate	American University Beirut
rebecca	Certner	PHD student	northeastern university
rebecca	Fisher	Dr.	university of western australia
Rebecca	Ingram	University of Hawaii at Manoa	
rebecca	moss	marine coordinator	the nature conservancy
Refer	Vize	Professor	University of Calgary
Regina	Zewng	Gran Student	Florida Atlantic University
Remiel	Catral	Post Doc	UCSB
Remy	Gatins	UC Santa Cruz	PhD student
Renata	Ferrari	DR	University of Sydney
Renata	Legoosela	PhD	UNSYD
Renate Ferarri		phd	Univ Sydney
Rene	van der zande	student	univ of queensland
Revecca	Thuibor	Professor	USC
Rhia	Gonzales	U.P. Marine Science Institute	PhD Candidate
Ricardo	beldade	Post Doc	CNRS
Richard	Laplace	Mr	University of Virgin Islands
Richard	appeldovan	professor	university of puerto rico
Richard	Aronson	professor	florida tech
Richard	Bitler	engineer	Xylem- Anderaa
Richard	Coleman	Ms	HIMB, UHM
Rick	MacPherson	Pelagia Consulting	Principal
Rili	Dohani	director	coral triangle center
Rob	Ferguson	Citizen	
Rob	Oconner	NOAA GIS	UH
Rob	O'Conner	Student	U Hawaii
Rob	Ruzicka	research assistant	Florida Fish & Wildlife
Robert	Lamb	Student	Brown USA
Robert	Streit	student	James Cook University
Robert	Warner	Professor	UCSB
Robert Bryan	Casauay	University of the Philippines	student
Robert Thomas	Etti	Mote Marine Laboratory	Administrative Manager

Robert van Woesih		PhD	Florida Inst Technology
Robin	Newbold	chair	mnmr
Roco	Gorca	Researcher	U Megdoleuce
Rodrigo	Villalobos	PHD student	KAUST
Rodrigo Alfredo	NÃ±ez-Inzunza	Universidad AutÃ³noma de YucatÃ¡n	Bachelor Marine Biologist
Roger	Beedem	PhD	
Rohan	Brooker	PhD	U Delaware
Rom	Dizon	Dr	University of the Philippines Bagrrio
roman	vasquez	phd	unam/mexico
Ron	Vave	University of Hawaii	Phd student
Ron	Hill	Dr	Texas AM galveston
Ronald	Olavides	Master Student	UP-MSI
Roney Rodrigues		ING	Sinotico
Roquelito	Mancao	RARE	Director for Technical Operations, Philippines
Rosa Sotelo-Casas		BS	Universidad de Guadalajara
rosenna	lee	student	uh hilo
ross	cunning	dr	Himb
Ross	Martin	Marine Mont. Tech	DAR
Roxanna Miller		Mrs	Univ Guam
Royale	Hardenstine	Student	KAUST
Ruben	Costa	PhD Student	Kaust
Ruben	van Hooi donk	NOAA	Dr
Rudy	Salerdo	HCC Manager	Freelance
Rulie	Joy Gabriel	student	Palau Community College
rupert	ormond	prof	heriot watt university. Edinburgh
Russell	Carpenter	Researcher	UNH
Rya	Carr	The Nature Conservancy	
Ryan	P Moyer	Phd Associate Resident Scientist	FI Fish & Wildlife
Ryan	Ramasamy	Mr	JCU
Ryan McAndrews		MSc Student	ZMT Bramen
Ryotaro Izumi		student	University of the Ryakys
Sabrina	Rosset	Researcher	University of Southhampton
Sabrina Roth		MSc	University of Veteizy Maldives
safr	altman	research scientist	USACE
Saki Hari		phd	Univ Kymkys
Sal	Pagliari	Hawaii Institute of Marine Biology	Program Coordinator
Salles	G	PHD student	Criobe Moorea



Sally Keith		Asst Prof	Univ Copenhagen
Sam	Nietus	M. SC	University of Olderbors, Germany
sam	teicher	co founder	coral vita
Sam	w		TRE
Sam	Wohsen	PHD student	Penn state
sam	kim	phd	UQ Australia
sam	marmauag	dr	up-msi
Sam	Mathews	Mr	JCU
Samantha	Clements	ms	SID
Samatha Goyen		Ms	Univ Technology Sydney
Samiel			
Suleima		Mr	Sociedad Ambiente Marina
Sammy	Dowog	PhD	UCSB
Samuel	Matthews	ARC Centre of Excellence for Coral Reef Studies	Mr
Sandi	Calhoun	PhD student	SDSU
sandy	webb	teacher	Mililani High School
Sangeeta Mangubhai		PhD	Wildlife Conservation Society
Sara	Ayberg	Student	UVI
Sara	Cannon	Student	University of British Columbia
Sara	Sawyer	Assoc. prof	glenville state college
Sara	wilson	student	kaust
Sara	Wilson	MSC	Kaust
Sara	Williams	phd student	northwestern u
Sarah	Frias-Torres	Smithsonian Marine Station	Research Collaborator
Sarah	Hile	Mrs	CSS/NOAA
Sarah	Gierz	miss	James Cook University
Sarah	Groves	scientist	univ. virgin islands
Sarah	Lemer	PHD	Harvard University
sarah	royer	researcher	UH manoa
Sarah Joy Bittick		PhD candidate	UCLA
Sargento	Garuulon	grad student	UNM
Saskia	Jurriaans	PHD student	James Cook University
Scott	Turner	CEO Pride of Maui	Pride
Scott Consaul	Atkinson	University of Queensland	
sean	beckwith	mr	usf college of marine science
Sean	Benler		
sean	Connolly	professor	james cook university
Sean	Mcnally	Gran Student	UMASS boston
Sean	Porter	South African Association for Marine Biological Research	Dr
sebastian	mierino	special assistant	palau congress



sebastian	schmidtvoach	dr	uni oldenburg
Sebastian Fersc		Assoc Researcher/Phd	ZMT Bremen/Germany
Sebastien	villega	dr	cnrs (researcher)
Senlin Tang		phD	Academia Sinica Taiwan
sere	nathieu	dr	ird
Sergio	Avendubion	Student	UNDM
Sergio	Drquandulain	Men C	
Sergio R	Floeter	PhD	UFSC-Brazil
Seth	Teicler	Partner	Grant Point Ventures
shaye	wolf	science director	center for biological diversity
Sheila	McKenna	National Park Service	Marine Ecologist
Sheila Kitchen		Post-Doc	Penn State
Shellia	Haleel	Student	UH Manoa
Sherry	Constrantiric	MMA manager	TNC
Sherry	Tenn	Waipahu High School	Science Teacher
Shilpi	Saha	Department of zoology, Jagannath University, Dhaka- 1100, Bangladesh	M.Sc. Student
Shiori Kuuihiro			University of Ryukyus
shireen	rahimi	u miami	student
Shirley	Koshibo	Researcher	Palau Intl. coral Reef Center
Shon	Morisrige	hawaii resident	HPU
Si Tuan	Vo	Dr.	Director. Vietnam Institute of Oceanography
Silvia	Beurmann	University of Hawaii	Graduate Assistant
Silvia	Strauges	Phd Student	university autonowa Baie California sur
Simon	Thorrold	Woods Hole Oceanographic Institution	Senior Scientist
Simona	Boschetti	Independent	PhD
Simone	Montano		
Simone	Shoemaker	Student	James Cook University
Skye	McKenna	Phd	James Cook University
Sofia	de la Sota	University of Hawaii at Manoa	Ph.D. student
Sofia	Mendez	Undergraduate Student	Universidad de San Carlos de Guatemala
sophie	dove	prof	UQ
StÃ©phane	Roberty	University of Liege (Belgium)	Dr
Stacey	Kilarski		
Stacey	Tighe	Nautilus Enterprises	Marine Science and Policy Specialist

Staci	Lewis	PhD Candidate	Stanford Uni
Stacy	Baez	Pew Charitable Trusts	Senior Associate
Stacy	Peutier	Research Technician	Bermuda Institute of Ocean Science
Stella	Swanson	PhD	UCSB
Steph Gardener		miss	Univ Technology Sydney
Stephanie	coher	student	switzerland
Stephanie	Farrington	Harbor Branch Oceanographic Inst. At FAU	Deep-Sea Coral Reef Biologist
Stephanie	Guertin	N/a	Scientist
Stephanie	Walker	Physician	Spartanburg Regional
Stephanie	Wear	DR	Nature Conservancy
Stephen	Campbell		univ of san diego
Stephen Campbell			USD
Steve	Comean	PhD	university of western australia
Steve	Simpson	University of Exeter	Dr
Steve	Volhmer	PhD	Northeastern
steve	doo	mr	sydney university
Steven	Colbert	University of Hawaii at Hilo	Assistant Professor
Steven	Johnson	Mr.	university of Guam
steven	lee	masters student	university of bremen
Steven	Lindfield	Coral Reef Research Foundation	Dr.
Steven	Moore	Professor	California State University Monterey Bay
Steven G.	Aclehesoi	Oceanographer	Naval Research Lab
Stina	Tano	PHD	Stockolm university
Stuart	Phinn	The University of Queensland	Professor
Stuart	Sandin	Professor	Scripps inst of Oceanography
Su	Sponaugle	Oregon State University	Professor
sue	Welle	Consultant	Cambridge, UK
Suei	Utmio	Biologist	
sun	kim	student	UQ
Suppakarn	Jundang	MS	
Sus	Ennjiert	Professor	UNAM
Susan	Burr	AECOS, Inc.	Sr. Vice President
Susan	Griffin	Biologist	NOAA
Susan	Owen	PhD	U of Auckland
Susan	Williams	professor	univ. california davis
Susan Karen	Bryan	RCUH	Scientific diver
Susan Middleton		Artist	Archipelago co-author
Susana	Enrique	Researcher	UNAM(mexico)

susann	rulla	manager	rulla forums
susann	watson	researcher	JCU
Susanne	Segerholm		artist
susanne	leahy	dr	james cook university
Sushma	Mattan Moorgawa	University of Mauritius	Mrs
Suzanne	Dean		
Suzanne	Miulls	Endocrinologist	Criobe Moorea
Suzanne Perera		CNAP	CNAP
Suzette	Lang	Environmental Scientist	Environemntal Expertist Ltd
sven	rohde	phd	university of odenburg
Sylvia	Ostemeder	Phd Candidate	Curtin University, CMST
Tali Tribilz		PhD	Haifa U
Talina	Dela Cruz	MS	
talna	cruy	ms	up-msi
tamara	martin	researcher	center of costal ecosystem research
Tammy	Goulet	Dr.	ALMs Australia
Tan	Hong	Lecturer	UMT, Malaysia
Tania	Kobelkowsky		
Tanya	Brown	Marine biologist	Florida International University
Tara	Hetz	University of Hawaii Manoa	Student
Taryn	Laubenstein	Ms.	JCU
Tawa Kobelkowsky Vidio		MsC	Univ Sydney
Taya	Hemig	student	Stanford Univerity
Tayier	Massey	PhD student	university of hawaii
teo	medina	phd	U de G
Teri			
Teramoto		Security Instructors Safety	Univ Hawaii
Terri Iwdan-Sellars		Sr Biologist	US Army Corps of Engineers
Tess	Moriarty	Miss	Velaa Private Island- Maldives
Tessa Hempson		PhD researcher	ARC COE for Coral Reef Studies
Thomas	Oliver	OA Program Manager	UH JIMAR
Thomas	Remington		
thomas	Adam	Research Biologist	UCSB
thomas	fellows	university of sydney	
thomas	stevens	Master Student	James Cook University
Tiana	Wn	student	pfzer
Tiara	Stark	MS	UHM
Tiffany	Sih	miss	jcu
Tiffany Nicole Cunanan		DAR - Monitoring Tech	DLNR - DAR
till	rothig	phd student	kaust



Tim	Cooker	Dr	UWA
Tim	Ravas	Professor	Kaust
Tim Noyes		PhD	
Tim Scheufen			UNAM
Tisa Aldersib		Ranger	QLD Parks & Wildlife Services
Todd	JV	Associate Professor	Penn state
todd	kane	professor	horn point lab u maryland
Tom	bowling	CEO	BIOTA PALAU
Tom	Cooper	PhD	UMA
Tom	Biscere	Phd Student	IRD
Tom Bridge		Research Fellow	James Cook University
Tomai	londoia	phd	UNAM
Tomai	Loper London	PhD	UNAM
Tomas	arcile	student	penn state
Tomas	Lopez	PHD	Penn state
Tomi hi lao	Niqauhi	Dr	The Univ of Tokyo
Tory	Chase	PHD	JCU
Tracy a	Ziegler	marine ecologist	national park service CNMI coastal resource management
tran	castn	Director	FlightWave
Trent	Lukaezyk	PhD	uq
tries	razak	student	Hokkaido University
Truxsh	Watanabe	Lecturer	univ of queensland
Tuben	veneyus	researcher	kaust
tullie	Toorenes	phd student	PhD
Tuttle	Lillian	Oregon State University	SDSU
Ty	Roach		SDSU
Ty	Rouch	Social Scientist	uh hilo
tyler	phelps	student	aims.
urma	humphries	manager	Federal University of Rio De Janeiro
Uuia Peluso	Azevedo	MSC	MS Candidate
Valeri	Lapacek	University of Guam	EPHE
Valeriano Parranicinn		Associate Professor	Carmabi
Valerie	Chamberland	Mac	
Valerie	Kirsch		
valerie	pizarro	phd	ecomares ngo
Van Brown		PhD	Uphihphmus
Vanessa	Bednarz	PhD	CSM
Vanessa	Lovenburg	PHD student	university of oxford
Vanessa	rednarz	PhD	CSM
Vanessa	Robitzch	KAUST	PhD Student

vanessa	van heerden	student	cal state, channel island
Vania	Coelho	Dominican University of California	Professor
Ved	Chirayath	NASA Ames Research Center	Research Scientist, Director, Lab for Advanced Sensing
Verena	Schrameyer	Dr	UTS, Australia
Verera	Sclanger	PhD	UTS
Vernhop	Viynhearn	Assistant Professor	Thailand
Veronica Radice		PhD candidate	Univ Queensland
Via	Petrovic	PHD student	UCSD
Vicky	Goldstein	Director	Colorado Ocean Coalition
Victor	Galvan	Ecological Research Coordinator	Puntaccina Group Foundation
victor	tuczon	prof	uq
Victor	Zykov	Schmidt Ocean Institute	Director of Research
Victora			
Nestor		researcher	Palau Intnational Coral Reef
Viktor	Branhneris	Research asst	Un. Virgin Islands
Vincent Holomen		Dr	Univ Phil at Los B?
		Center for action research on environment science and society	
Vineeta	Hoon		Dr
Violeta	Martinez	Student	UABCS, Mexico
Vittoris Ernesto Brando		Dr	Natl research center
VI? Kosyuri?		phd	EDEP
Walter	Dudley	PhD	UH Hilo
Watare	Oboda	MR	ECOH Corporation
Watchara	Samsuvan	student	Ramkhamhaeng University
Wendy	Kuntz	Dr	Kapiolani cc/uh
Wes	Chau	MS	Films
Wes	Dukes	Cordinaror	DAR
Whitney	Hoot	Ms	NOAA
Wild		PhD	ZMT Brenda
wilfredo	licuanna	proffesor	de la salle university
Willem	Reneme	Dr.	Haluralis Biodiveristy Central
William	Fitt	University of Georgia	Professor
William	Holeer		Coral Guardians
William	Holzer	Dr	Coral guardian
William	McLean	Master	UCSB
Wilson	Lei	UH Manoa	Researcher
Xingchen	wong	Dr	princeton
yanmick	mulders	phd student	uga
Yasmin	Seoane	UFRJ Brazil	Sra

Yoan	Eynaud	Scripps institution of oceanography	Researcher
Yosmikatsu	Nakano	MSC	University of Japan
Yossi	Loya	Professor	
yuen	shyan	dr	university of the kaykyas, japan
Yuka	Kushida	MsC	University of Ryukyus
Yuka Kushida		Masters student	University of the Ryukus
Yuko	Stzendzr	grad student	UH Manoa
Yulci	Tomad	PhD	univ of ryukyus
Yvonne	Sawell	PhD	BIOS Bermuda
Zahirvl	Islam	Biologist	Marine life alliance
Zane	hurley	earth science teacher	bak middle school
Zara	Louise-Cowan	Miss	James Cook University
Zoe	Sims	Princeton University	





## EXHIBIT A A



## NAVAL HISTORICAL FOUNDATION

*Preserving and Honoring the Legacy of Those Who Came Before Us  
Educating and Inspiring the Generations Who Will Follow*

JUL 27 2016

President Barack Obama  
1600 Pennsylvania Avenue  
Washington, DC 20001

Dear President Obama:

Since 1926, the Naval Historical Foundation has been in the forefront of providing stewardship to preserve our naval and maritime heritage. Previous successful preservation efforts include John Paul Jones' birthplace in Kirkbean, Scotland; Stephen Decatur's home near the White House, and Commodore Dewey's flagship cruiser *Olympia*. Now, another significant effort has drawn our attention.

Senator Brian Schatz and a group of prominent Native Hawaiians have asked you to use the Antiquities Act, consistent with the precedents of past Presidents, to expand the boundaries of the existing Papahānaumokuākea Marine National Monument, which now includes the Battle of Midway National Memorial and Midway Atoll National Wildlife Refuge. These are areas of very special significance to veterans, their descendants, and U.S. military history. The Naval Historical Foundation is in full support of the Senator's recommended "thoughtful" expansion of the current monument which was established by President George W. Bush ten years ago. These two sequential Presidential executive acts will create the world's largest marine protected area.

The Battle of Midway National Memorial was created so "that the heroic courage and sacrifice of those who fought against overwhelming odds to win an incredible victory will never be forgotten." The boundaries of the present National Memorial include all lands and waters of the Midway Atoll National Wildlife Refuge. The Senator's expansion would give added protection to the remains of the aircraft and ships, such as the *Yorktown* and *Hammann*, and much of the area of the final resting places, beneath the sea, of those brave servicemen who lost their lives. The Battle of Midway proved the resilience of the American people and is regarded as a "turning point" in the endeavors of the U.S. and its allies in the Pacific during World War II – a most fitting tribute on the eve of the 75<sup>th</sup> Anniversary.

The Foundation is proud to add its voice to the coalition of overwhelming community support, including Native Hawaiians, local fishermen, conservationists, local veterans, students, scientists, and elected leaders. Expanding Papahānaumokuākea to protect the biological, cultural, and historical resources co-located with areas of the Battle of Midway would further add to the impressive record of America's leadership in global maritime conservation efforts.

Very respectfully,

William J. Fallon  
Admiral U.S. Navy (Retired)  
Chairman, Naval Historical Foundation

DOI-2018-06 00158



## EXHIBIT BB

# GOVERNOR'S OFFICE NEWS RELEASE: OHA NAMED CO-TRUSTEE OF PAPAHĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT

Posted on Jan 12, 2017 in [Latest News](#), [Newsroom](#), [Press Releases](#)

## **Joins state, NOAA, Fish & Wildlife Service**

HONOLULU – Gov. David Ige, the Office of Hawaiian Affairs (OHA) and the U.S. Secretaries of Interior and Commerce have signed an updated [Memorandum of Agreement](#) (MOA) adding OHA as a co-trustee of Papahānaumokuākea Marine National Monument. It is the largest, contiguous, fully protected conservation area in the U.S. and encompasses 583,000 square miles of ocean waters, including ten islands and atolls in the Northwestern Hawaiian Islands.

With the signing of the updated MOA, co-trustee agencies are: the Commerce Department (National Oceanic and Atmospheric Administration); the Interior Department (Fish and Wildlife Service); the State of Hawai'i Land and Natural Resources Department (DLNR) and the Office of Hawaiian Affairs.

"Honoring, respecting and perpetuating the Native Hawaiian culture and sustainability are among my administration's top priorities. OHA has participated in the decision making process since the monument was first designated by President Bush more than ten years ago, and previously, when the area was managed as the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve. The monument is world renowned for both its natural and cultural attributes and OHA's co-trustee role will ensure the protection of Native Hawaiian cultural features and provide a critical cultural sensitivity to every decision that is made to protect this unique place," said Gov. David Ige.

"We fully support and embrace OHA as a co-trustee of the monument. It is impossible to separate decisions about nature from cultural considerations. OHA's elevated voice and input will inform management actions on a broad scale," said DLNR Chair Suzanne Case.

OHA has been one of seven collaborating agencies for Papahānaumokuākea, including NOAA's Office of National Marine Sanctuaries and National Marine Fisheries Service; the Fish and Wildlife Service's Ecological Services and Refuges, and the DLNR Divisions of Aquatic Resources and Forestry and Wildlife.

Papahānaumokuākea is rich in history and cultural significance. In 2010, UNESCO inscribed the area as our nation's first mixed (natural and cultural) World Heritage Site.

"The Papahānaumokuākea Marine National Monument is of great cultural significance to the Native Hawaiian community and houses important marine ecosystems that the Department of Commerce is committed to protecting for future generations," said U.S. Secretary of Commerce Penny Pritzker. "Over the past 10 years, we have forged a strong partnership with the State of Hawai'i and we look forward to collaborating with the Office of Hawaiian Affairs on our continued efforts to preserve this unique environment."

"The Northwestern Hawaiian Islands are home to one of the most diverse and threatened ecosystems on the planet and a sacred place for the Native Hawaiian community," said U.S. Secretary of the Interior Sally Jewell. "By including OHA as a co-trustee for Papahānaumokuākea, we are highlighting not only the protection of natural treasures like the pristine coral reefs and deep sea marine habitats, but also the significant cultural and historic resources of the area that will be preserved for current and future generations."

"We thank President Barack Obama and our partners and supporters for making this a reality. Since our community's first involvement in the management of these kūpuna island more than a decade ago, the goal has been to get Native Hawaiians a seat at the decision-making table. We understand the challenges ahead and are firmly committed to fulfilling our kuleana to this place and our beneficiaries," said OHA Chair Rowena Akana.

"This historic action rightfully places the Native Hawaiian voice at the highest levels of decision making for this culturally and spiritually significant wahi pana (sacred place) and will help advance our people's understanding of the deep connection of our entire



pae‘aina (archipelago). We look forward to serving in our new role, in partnership with our co-trustees, to develop and implement a resource management structure that integrates the best of conventional science and traditional practices. We hope that Papahānaumokuākea will demonstrate to the world that integrating science and indigenous knowledge is the best management model to sustain our fragile global environment,” said Kamana‘opono Crabbe, OHA’s chief executive officer.

OHA is a constitutionally established body, set as a separate state entity independent of the executive branch of the State of Hawai‘i. Its primary responsibility is representing the interests of the Native Hawaiian community, including in the monument, through the perpetuation of Hawaiian cultural resources. This includes the customary and traditional rights and practices of Native Hawaiians that are exercised for subsistence, cultural and religious purposes under the Hawai‘i Constitution.

###

**Media Contacts:**

Jodi Leong

Deputy Communications Director/Press Secretary

Office of the Governor

Office: 808-586-0043

Mobile: 808-798-3929

[jodi.c.leong@hawaii.gov](mailto:jodi.c.leong@hawaii.gov)

Cindy McMillan

Communications Director

Office of the Governor

Office: 808-586-0012

Mobile: 808-265-7974

[cindy.mcmillan@hawaii.gov](mailto:cindy.mcmillan@hawaii.gov)